



STOCKTON-ON-TEES CORPORATION

REPORT

OF THE

Medical Officer of Health


TO THE

TOWN COUNCIL FOR THE

YEAR 1935

G. C. M. M'GONIGLE,
M.D., D.Hy., B.S., D.P.H.

MEDICAL OFFICER OF HEALTH :
MEDICAL SUPERINTENDENT OF ISOLATION HOSPITAL :
SCHOOL MEDICAL OFFICER



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b30174971>

CONTENTS.

| | Page |
|--|------|
| Staff | 3 |
| Social Conditions | 8 |
| Area | 8 |
| Population | 8 |
| Unemployment and Poor Law Relief ... | 8 |
| Vital Statistics | 9 |
| Births | 9 |
| Birth-rate | 11 |
| Still-births | 9 |
| Deaths | 9 |
| Infantile Mortality | 9 |
| Deaths from Puerperal Causes ... | 9 |
| Principal Causes of Death | 11 |
| Notes on Death Returns | 11 |
| General Provision of Health Services ... | 12 |
| Laboratory Facilities | 12 |
| Ambulance Facilities... | 12 |
| Home Nursing | 12 |
| Hospitals | 12 |
| Clinics and Treatment Centres ... | 12 |
| Midwifery and Maternity Services ... | 12 |
| Institutional Provision for Mothers or Children | 12 |
| Health Visitors | 12 |
| Infant Life Protection | 12 |
| Orthopædic Treatment | 12 |
| Sanitary Circumstances of the Area ... | 12 |
| Water | 12 |
| Rivers and Streams | 13 |
| Drainage and Sewerage | 13 |
| Closet Accommodation | 13 |
| Public Cleansing | 13 |

| | Page |
|--|------|
| Sanitary Inspection of area | 14 |
| Number and Nature of Inspections... | 14 |
| Number of Notices served ... | 15 |
| Work done under Public Health Acts | 15 |
| Inspection of Factories, Workshops, etc. | 16 |
| Special classes of Premises and Occupations subject to control by the Local Authority | 17 |
| Slaughter-houses | 17 |
| Offensive Trades | 17 |
| Common Lodging Houses ... | 17 |
| Houses-let-in-Lodgings | 18 |
| Tents, Vans, Sheds, etc. | 18 |
| Schools | 18 |
| Shops | 18 |
| Smoke Abatement | 18 |
| Swimming Baths and Pools | 18 |
| Housing | 19 |
| Slum Clearance | 19 |
| Housing Act, 1935 | 21 |
| Overcrowding Survey | 21 |
| Number of Houses built | 24 |
| Housing Statistics | 24 |
| Inspection and Supervision of Food ... | 26 |
| Milk supply | 26 |
| Bacteriological Examination of milk | 26 |
| Milk consumption | 27 |
| Tuberculosis in milk | 28 |
| Milk (Special Designations) Order, 1923 | 28 |
| Tuberculosis Order, 1925 | 29 |
| Meat Inspection | 29 |
| Public Health (Meat) Regulations... | 29 |
| Inspection of Meat—Tables ... | 29 |
| Slaughter of Animals Act, 1933 ... | 30 |
| Inspections of Shops, Stalls, etc. ... | 30 |
| Foodstuffs condemned | 31 |
| Food and Drugs (Adulteration) Act, 1928 | 31 |
| Chemical and Bacteriological Examination of Food... .. | 32 |
| Nutrition | 32 |

| | Page |
|--|-------|
| Prevalence of, and Control over, Infectious and other Diseases | 34 |
| Scarlet Fever | 34 |
| Diphtheria | 35 |
| Pneumonia | 35 |
| Non-Notifiable infectious diseases ... | 36 |
| Disinfection... .. | 36 |
| Bacteriological Examinations... .. | 36 |
| Notifiable diseases—table | 37 |
| Isolation Hospitals | 38 |
| Notes on cases | 39 |
| Cancer | 43 |
| Prevention of Blindness | 43 |
| Tuberculosis, new cases and Mortality ... | 44 |
| Ophthalmia Neonatorum | 45 |
| Maternity and Child Welfare | 46 |
| Maternity and Child Welfare Centres ... | 46 |
| Breast Feeding | 46 |
| Abortion, Miscarriage and Premature Birth | 47 |
| Maternal Deaths | 50 |
| Calcium | 48 |
| Vitamins A, D and E | 49 |
| Attendances at Centres | 51-52 |
| Home Visits paid by Health Visitors ... | 53 |
| Infantile mortality | 53 |
| Infantile mortality—table | 55 |
| Ante-natal Centres | 56 |
| Supervision of Midwives | 57 |
| Robson Maternity Home | 58 |
| Diseases of Animals Acts | 60 |
| Cattle Market Returns | 61 |
| Appendix | 62 |
| Table of Statistics | 62 |
| Causes of Death — table | 63 |

BOROUGH OF STOCKTON-ON-TEES.

TOWN COUNCIL.

HIS WORSHIP THE MAYOR (Alderman W. NEWTON)

Alderman C. W. ALLISON *

„ G. H. DOUTHWAITE*

„ J. W. GARGETT, J.P.†

*Chairman Maternity and
Child Welfare Committee*

Alderman J. GOLDSTON*

Alderman E. PICKWORTH. J.P.

„ J. RILEY

„ W. J. SCAIFE*†

„ R. SPARK, J.P.*

Chairman Health Committee

Alderman W. THOMPSON

„ W. WAKE*

Councillor O. C. ATKIN

„ C. R. BOOTH †

„ H. BRIDGES, J.P.

„ W. BROWN

„ T. BULMER †

„ T. W. COATES*†

„ A. COLLYER †

„ H. DIXON* †

„ Mrs. M. J. FRANKLAND, J.P.*†

„ J. GIBBONS*

„ R. GIBSON*†

„ H. HAXBY

„ W. HESLOP*†

„ H. HODGSON

„ J. T JOHNSON*

„ M. M. KELLY*

„ A. LEWIS*

Councillor W. LILLYSTONE

„ J. S. LUNN

„ H. PEARSON†

„ W. J. E. RINGQUIST

„ B. S. ROBSON

„ A. ROSS

„ J. SHARKEY

„ A. SMITH†

„ J. STODDART*

„ A. J. THATCHER

„ G. THORNTON

„ G. T. WALLIS

„ T. A. WESTWATER

„ J. E. WILYMAN

„ W. M. WORTH

„ W. E. WRIGHT

*Members of the Health Committee.

†Members of the Maternity and Child Welfare Committee.



PUBLIC HEALTH OFFICERS OF THE LOCAL AUTHORITY.

Medical.

- G. C. M. M'GONIGLE, M.D., D.Hy., B.S., D.P.H.,
 Medical Officer of Health, School Medical
 Officer, Medical Superintendent of the Isolation
 Hospitals, Medical Superintendent of Robson
 Maternity Home and Inspector of Midwives ... Whole time
- W. M. RITCHIE, M.B., CH.B., (Medical Practitioner),
 Deputy Medical Officer of Health, and Assistant
 Maternity and Child Welfare Medical Officer, Part time
- A. GOMPERTZ, M.R.C.S., L.R.C.P., (Medical
 Practitioner), Assistant Maternity and Child
 Welfare Medical Officer, ... Part Time
- T. J. KIRK, M.B., (Medical Practitioner), Assistant
 Maternity & Child Welfare Medical Officer ... Part time
- E. B. G. EWEN, M.B., CH. B., D.P.H.,
 Assistant School Medical Officer. ... Whole time

Sanitary Staff.

- E. G. POWER, A.R.S.I., Senior Sanitary Inspector Whole time
- J. KIRBY, M.R.S.I., M.I.S.E., Cert. San. Ins. Jt. Bd.,
 Meat and Food Cert. R.S.I., San. Sc. R.S.I.,
 Sanitary Inspector ... Whole time
- E. VARLEY, Cert. San. Ins. Jt. Bd., Meat and
 Food Cert. R.S.I., Sanitary Inspector ... Whole time
- MISS M. JONES, Cert. R.S.I., Sanitary Inspector... Whole time

Tuberculosis Health Visitor.

- MISS J. CLACHERTY, General Trained, Cert. C.M.B.,
 H.V. & School Nurse Cert. R.S.I. ... Whole time

Health Visitors.

| | | |
|--|--------|------------|
| MRS. C. CAMERON, General Trained, Cert. C.M.B., (also Assistant Inspector of Midwives) | ... | Whole time |
| MISS L. CATCHPOLE, Cert. C.M.B., H.V. and Sch. Nurse, Cert. R.S.I. | ... .. | do. |
| MISS B. FIDLER, General Trained, Cert. C.M.B., | | do. |
| MISS L. JONES, General Trained, Cert. C.M.B., | | do. |
| MISS M. VEITCH, H.V. and Sch. Nurse, Cert. R.S.I. Cert. C.M.B., Board of Education Diploma. | | do. |

School Nurses.

| | | |
|--|--------|-----|
| MISS M. LAMB, General Trained | ... .. | do. |
| MISS W. WARD, General Trained (Dental Nurse)... | | do |
| MISS M. A. ALTON, General Trained (School Attendance Nurse) | | do. |
| MISS O. BRYAN, General Trained | ... .. | do. |

School Dental Officer.

| | | |
|----------------------|--------|-----|
| A. E. PATTIE, L.D.S. | | do. |
|----------------------|--------|-----|

Veterinary Inspector.

| | | |
|--------------------------|--------|-----------|
| S. E. MORTON, M.R.C.V.S. | | Part time |
|--------------------------|--------|-----------|

Clerks.

| | | |
|--|--------|------------|
| H. KIPLING, Cert. R.S.I., Chief Clerk | ... .. | Whole time |
| W. BAKER | ... .. | do. |
| F. ALLAN | ... .. | do. |
| MISS J. HALL, School Medical Service | ... .. | do. |
| MISS I. PARISH, School Medical Service | ... .. | do. |

Matron of Isolation Hospitals.

| | | |
|-----------------|--------|-----|
| MISS E. HODGSON | | do. |
|-----------------|--------|-----|

Matron of Robson Maternity Home.

| | | |
|------------------|--------|-----|
| MISS E. JEFFRIES | | do. |
|------------------|--------|-----|

Health Department,
11, Finkle Street,
Stockton-on-Tees,
June 17th, 1936.

To the Town Council of the Borough of Stockton-on-Tees.

Mr. Mayor, Madam and Gentlemen,

The year 1935 has been one of great activity in the Public Health Department of the Town Council and the pressure of work upon the staff has been severe.

It is usual to estimate the health of a community by comparing its death rate with that of the country as a whole but regard should be given to the fact that such a comparison gives an imperfect picture of the actual state of the health of a district. The number of deaths per thousand of a population bears no true statistical relation to the number in other groups or communities unless the age and sex distribution of the populations compared are similar. If any given community contains a large percentage of aged people a high crude death rate is, naturally, to be expected. On the other hand a population which has many young people should have a low crude death rate.

The population of Stockton-on-Tees is made up, as are other populations, of persons of different ages, but there is a higher proportion of young persons in Stockton-on-Tees than in the country as a whole. If the fatality rate at each age of the citizens of the Borough were identical with that at each age throughout England and Wales then the Stockton-on-Tees death rate would be lower than the mean death rate for the country. For the year 1935 the crude death rate for England and Wales was 11·7 per 1000 of the population. That for Stockton-on-Tees was 12·2 per 1000. Now I have stated that the proportion of young persons in our population is higher than the average for England and Wales and a preponderance of young persons in a community should lower the annual death rate of that community.

The Registrar General has supplied what is known as a "comparability factor" by means of which a death-rate can be calculated which can form a basis of comparison with the rates in other areas. By the use of this factor the adjusted death-rate of the town is 13.57 per 1000 of the population. The death-rate for England and Wales is 11.7. The Stockton death-rate is therefore 1.87 per 1000 higher than that for the country as a whole.

The infantile mortality rate is the lowest on record and is actually lower than that for England and Wales. The care and attention and supplementary nourishment given at the Child Welfare Centres has no doubt played a large part in producing this low rate.

The maternal mortality rate is this year high, 6.68 per 1000 total births, compared with 3.93, the rate for the country. The increase has occurred in non-septic cases. Three deaths occurred following upon abortions and if these were deducted the total maternal mortality rate would be 4.44 per 1000 total births, which is approximately the average for the country.

Matters of moment during the year were the intensive work in connection with housing, both as regards slum clearance and the survey of overcrowding.

The town is still without a maternity home adequate in size to meet demands. Various avenues were explored during the year as to the conversion of existing buildings into a maternity home, but without success. It is obvious that the most satisfactory method of dealing with this problem would be to build a hospital specially designed for the purpose. Up to the present the question of cost has prevented such a scheme materialising.

Unemployment, with its attendant poverty, is still prevalent in the town and investigation has shown that the relationship between poverty and a high death-rate is a very close one.

I have the honour to remain,

Your obedient servant,

G. C. M. M'GONIGLE,

Medical Officer of Health.



SECTION A. — STATISTICS and SOCIAL CONDITIONS of the AREA.

| | |
|--|----------------------|
| Area (in acres)—Land and Inland Water ... | 5,465 statute acres. |
| Population—At Census, 1931 | 67,724 |
| „ —Estimated by Registrar General, June, 1935 | 67,050 |
| Number of Inhabited houses (end of 1935) according to the Rate Books | 17,007 |
| Rateable value of the Borough | £312,831 |
| Sum represented by a Penny Rate | £1,183 |

Social Conditions. There was a further reduction in the average number of men on the unemployed register during the year. The figure for the year 1935 was approximately 6,000, compared with 6,200 for 1934, 7,206 in 1933, and 8,783 in 1932. The approximate number of cases in receipt of out-relief during the year also showed a decrease from 2,162 to 2,118. The amount paid in out-relief during the year was £76,864.

Garden Allotments. The Mayor's Unemployment Committee has provided (as part of its scheme for the amelioration of the hardships inseparable from prolonged unemployment) allotment gardens for approximately 300 men. I have watched with great interest the results which have accrued from this piece of social service work and I can state with definite emphasis that, from a public health point of view the effect has exceeded expectations. The increased consumption of vegetables by the families of the allotment holders has pronouncedly improved the general standard of health of both children and adults. It is a matter for regret that unemployed and lower paid workers have not sufficient purchasing power to procure a sufficiency of vegetables for optimum health.

The good effect of increased consumption of vegetables has been intensified among the families of those men who participate in the poultry scheme, by the eggs and poultry eaten.

If, from any cause, the voluntary scheme referred to above ceases its activities, the Health Committee should advocate its continuance and extension under municipal control; for it constitutes a valuable piece of constructive health work.

Public health and agriculture are closely linked and any scheme which ensures increased consumption of garden and dairy produce is beneficial to the community.

EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

Live Births :—

| | No. | Males | Females | Rate per 1000 of population | |
|--------------|------|-------|---------|-----------------------------|-------|
| | | | | 1935 | 1934 |
| Legitimate | 1231 | 615 | 616 | 18·36 | 18·41 |
| Illegitimate | 54 | 28 | 26 | 0·80 | 0·82 |
| Total | 1285 | 643 | 642 | 19·16 | 19·23 |

Still-births :—

| | No. | Males | Females | Rate per 1000 | Total Births. |
|--|-----|-------|---------|---------------|---------------|
| | | | | 1935 | 1934 |
| | 62 | 37 | 25 | 46·02 | 41·51 |

Deaths :—

| | Total | Males | Females | Rate per 1000 of population | |
|--|-------|-------|---------|-----------------------------|-------|
| | | | | 1935 | 1934 |
| | 820 | 432 | 388 | 12·23 | 12·15 |

The death-rate for the year 1935, adjusted by means of the application of the Comparability Factor supplied by the Registrar General is 13·57 per 1,000 of population, compared with 11·7, the rate for England and Wales.

Deaths from Puerperal Causes.

| | No. | Rate per 1000 total Births | |
|------------------------|-----|----------------------------|------|
| | | 1935 | 1934 |
| Puerperal Sepsis | 2 | 1·48 | 2·22 |
| Other Puerperal Causes | 7* | 5·20 | 2·22 |
| Total | 9 | 6·68 | 4·44 |

* including 3 abortions.

Infantile Mortality :—

| | | | | No. of Deaths | |
|--------------|-----|-----|-----|---------------|------|
| | | | | 1935 | 1934 |
| Legitimate | ... | ... | ... | 68 | 77 |
| Illegitimate | ... | ... | ... | 4 | 4 |
| Totals | | | | 72 | 81 |

Death-rates of Infants under one year of age :—

| | | | | 1935 | 1934 |
|---|-----|-----|-----|------|------|
| All infants per 1,000 live births | ... | ... | ... | 56 | 62 |
| Legitimate infants per 1,000 legitimate live births | | | | 55 | 62 |
| Illegitimate do illegitimate do | | | | 74 | 73 |
| Deaths from Measles (all ages) | ... | ... | ... | 7 | 16 |
| „ „ Whooping Cough (all ages) | ... | ... | ... | 4 | — |
| „ „ Diarrhoea (under 2 years) | ... | ... | ... | 5 | 5 |

In the following table the Birth-rate, Death-rate, and Infantile Mortality rate in Stockton-on-Tees and in England & Wales, for the years 1900 to 1935 inclusive, are shown.

| YEAR | STOCKTON-ON-TEES | | | ENGLAND & WALES | | |
|------|------------------|------------|--------------------------|-----------------|------------|--------------------------|
| | Birth Rate | Death Rate | Infantile Mortality Rate | Birth Rate | Death Rate | Infantile Mortality Rate |
| 1900 | 34·7 | 20·0 | 172 | 28·7 | 18·3 | 154 |
| 1901 | 33·1 | 19·7 | 190 | 28·5 | 16·9 | 151 |
| 1902 | 32·7 | 17·2 | 142 | 28·5 | 16·3 | 133 |
| 1903 | 31·6 | 16·1 | 137 | 28·5 | 15·4 | 132 |
| 1904 | 31·3 | 17·5 | 149 | 28·0 | 16·2 | 145 |
| 1905 | 29·5 | 17·6 | 149 | 27·3 | 15·2 | 128 |
| 1906 | 32·9 | 15·9 | 128 | 27·2 | 15·4 | 132 |
| 1907 | 30·2 | 17·3 | 115 | 26·5 | 15·0 | 118 |
| 1908 | 31·1 | 17·5 | 150 | 26·7 | 14·7 | 120 |
| 1909 | 26·5 | 14·0 | 121 | 25·8 | 14·5 | 109 |
| 1910 | 26·8 | 15·2 | 126 | 25·1 | 13·5 | 105 |
| 1911 | 29·4 | 16·6 | 132 | 24·3 | 14·6 | 130 |
| 1912 | 30·6 | 15·6 | 91 | 23·9 | 13·4 | 95 |
| 1913 | 31·4 | 18·1 | 141 | 24·1 | 13·8 | 108 |
| 1914 | 30·5 | 17·7 | 121 | 23·8 | 14·0 | 105 |
| 1915 | 28·2 | 17·9 | 127 | 21·9 | 15·7 | 110 |
| 1916 | 23·7 | 16·5 | 107 | 20·9 | 14·3 | 91 |
| 1917 | 21·0 | 19·0 | 130 | 17·8 | 14·2 | 96 |
| 1918 | 23·0 | 21·3 | 104 | 17·7 | 17·3 | 97 |
| 1919 | 24·2 | 16·6 | 104 | 18·5 | 14·0 | 89 |
| 1920 | 33·3 | 15·6 | 108 | 25·5 | 12·4 | 80 |
| 1921 | 29·2 | 12·9 | 92 | 22·4 | 12·1 | 83 |
| 1922 | 25·8 | 15·4 | 103 | 20·4 | 12·8 | 77 |
| 1923 | 24·9 | 11·9 | 75 | 19·7 | 11·6 | 69 |
| 1924 | 23·3 | 14·5 | 111 | 18·8 | 12·2 | 75 |
| 1925 | 23·35 | 14·38 | 92 | 18·3 | 12·2 | 75 |
| 1926 | 22·39 | 13·34 | 90 | 17·8 | 11·6 | 70 |
| 1927 | 20·93 | 13·55 | 91 | 16·7 | 12·3 | 70 |
| 1928 | 21·13 | 12·85 | 69 | 16·7 | 11·7 | 65 |
| 1929 | 20·50 | 15·26 | 109 | 16·3 | 13·4 | 74 |
| 1930 | 23·25 | 12·49 | 65 | 16·3 | 11·4 | 60 |
| 1931 | 19·92 | 12·51 | 79 | 15·8 | 12·3 | 66 |
| 1932 | 19·83 | 12·76 | 77 | 15·3 | 12·0 | 65 |
| 1933 | 17·91 | 12·72 | 96 | 14·4 | 12·3 | 64 |
| 1934 | 19·23 | 12·15 | 62 | 14·8 | 11·8 | 59 |
| 1935 | 19·16 | 12·23 | 56 | 14·7 | 11·7 | 57 |

Birth Rate. The live birth-rate is 19·16 per 1000 of the population. This figure is considerably higher than that for England and Wales which, for 1935, is 14·7 per 1000 of the total population.

The live birth-rate per 1000 of the population gives very little information of value and the comparison of the rate for any one area with that of another gives no real indication of comparative fertility. A factor which influences the birth-rate is the age-distribution of the population. It is obvious that an area containing a high percentage of elderly retired persons will have a lower birth-rate than one where there is a large number of young adults. The proportion of young adults in Stockton-on-Tees is greater than in the country as a whole and therefore a correspondingly high birth-rate is to be expected. The illegitimate births are too few in number to influence materially, the birth-rate. Comparison of birth-rates would be possible only if births were shown as the rate per 1000 married women of child-bearing age. If these rates were available some idea would be obtained of comparative birth-rates in various localities.

Notes on Death Returns for the year 1935. The total deaths registered during the year, after correction for inward and outward transfers, was 820, an increase of three on last year's figure. 264, or 32% of the total deaths, occurred in public institutions.

The principal causes of death during the year, with associated causes grouped together, were as follows. Comparative figures for the previous year and for the five year periods 1926-30 and 1931-35, are also given.

| Disease. | 1935 | 1934 | Five-year periods | |
|---|------|------|-------------------|---------|
| | | | 1931-35 | 1926-30 |
| Heart and Circulatory Diseases | 231 | 209 | 207 | 159 |
| Pneumonia, Bronchitis and other respiratory diseases ... | 111 | 104 | 112 | 174 |
| Cancer | 101 | 94 | 94 | 79 |
| Tuberculosis (all forms) ... | 51 | 67 | 64 | 85 |
| Cerebral Haemorrhage ... | 44 | 47 | 42 | 46 |
| Congenital Debility, Premature Birth, etc. | 36 | 44 | 49 | 50 |
| Totals ... | 574 | 565 | 568 | 593 |
| Percentage of total deaths ... | 70 | 69 | 67 | 65 |

SECTION B.—GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

A complete survey of the health services of the Borough was given in my annual report for the year 1930. Only changes or additions to the arrangements for the services enumerated in that report have been given in subsequent reports.

There has been no change in the arrangements made in respect to the following services during the year 1935.

General.

- (a) Laboratory facilities.
- (b) Ambulance facilities.
- (c) Nursing in the Home.
- (d) Clinics and Treatment Centres.
- (e) Hospitals.

Maternity and Child Welfare.

- (i) Midwifery and Maternity Services.
- (ii) Institutional provision for Mothers or Children.
- (iii) Health Visitors.
- (iv) Infant Life Protection (under Part I of the Children Act, 1908, as amended by the Children and Young Persons Act, 1932).
- (v) Orthopaedic Treatment.

SECTION C.—SANITARY CIRCUMSTANCES OF THE AREA.

Water. The Borough is supplied with water by the Tees Valley Water Board. This supply has its source in upland gathering grounds near which it is impounded in extensive reservoirs constructed about 30 miles from Stockton in the valleys of the Lune and the Balder, tributaries of the river Tees. The supply is constant and abundant and the quality is good.

A sample of the town's water supply was taken at a new house after standing for some days in a lead pipe in order to ascertain whether it exercised any plumbo-solvent action on the lead. The Analyst reported that the sample was free from contamination by the lead.

A sample of water from a well on a farm in the Borough was also sent for analysis during the year. The Analyst certified that the water was not of good and wholesome quality for human consumption. This water is not used for human consumption as the owner of the farm does not live on the premises but negotiations are proceeding with a view to the installation of a pipe supply from the mains.

Rivers and Streams. The crude sewage of the Borough is discharged into the river Tees without treatment.

Drainage and Sewerage. Apart from the drainage and sewerage of Housing Estates no schemes of major importance have been undertaken or completed during the year.

Closet Accommodation. Five midden privies were converted to the water carriage system during the year. Only 24 closets of this type now remain in the Borough, and 34 pan closets. These closets are on the outskirts of the town where a sewer is not available. In addition to the above nine waste water closets were converted to modern wash-down types. There are still 35 houses in the Borough provided with this type of convenience.

Public Cleansing. There has been no extension during the year of the arrangements for public cleansing other than that necessitated by new houses. A weekly collection is made and the refuse is mainly disposed of by tipping, about 90% of the refuse being disposed of in this way.

148 ashpans were substituted for fixed ashpits during the year.

SANITARY INSPECTION OF AREA.

Number and Nature of Inspections made by the Sanitary Inspectors
during the year 1935.

| | |
|--|------|
| Investigations made in respect to notifiable disease ... | 413 |
| Premises disinfected re infectious disease | 434 |
| do do re vermin | 118 |
| Number of re-visits where cases are isolated at home | 2 |
| Inspections following complaints | 480 |
| do under the Housing, &c., Acts | 376 |
| do under the Public Health Acts | 518 |
| Inspections of Offensive Trades | 183 |
| do of Workshops and Workplaces | 136 |
| do of Factories | 28 |
| do of Bakehouses | 125 |
| do of Cowsheds | 212 |
| do of Dairies and Milkshops | 165 |
| do of Stables | 115 |
| do of Slaughter-houses | 2749 |
| do of Markets and Shops | 1075 |
| do of Common Lodging Houses | 79 |
| do of Ice Cream Shops | 35 |
| do of Fried Fish Shops | 46 |
| do in regard to outstanding Notices ... | 1915 |
| Miscellaneous Inspections | 675 |
| Visits to Small-pox Contacts | — |
| Samples taken for Analysis | 50 |
| Samples taken for Bacteriological Examination ... | 74 |
| Visits to Houses-Let-in-Lodgings .. | 151 |
| Visits to Caravans | 20 |

NOTICES.

| | | | | Housing | | | Public Health | | |
|---------------------------------|-----|-----|-----|---------|-------|-------|---------------|-------|-------|
| | | | | Prel. | Stat. | Total | Prel. | Stat. | Total |
| Number of Notices served during | | | | | | | | | |
| 1935 | ... | ... | ... | 21 | 273 | 294 | 545 | 42 | 597 |
| Number of Notices complied with | | | | | | | | | |
| during 1935 | ... | ... | ... | 52 | 48 | 100 | 479 | 43 | 522 |

SUMMARY OF DEFECTS FOUND DURING THE YEAR
ON INSPECTION UNDER THE PUBLIC HEALTH ACTS.

| | | | | | | | Number discovered |
|--|-----|-----|-----|-----|-----|-----|----------------------|
| Defective floors | ... | ... | ... | ... | ... | ... | 69 |
| do walls | ... | ... | ... | ... | ... | ... | 74 |
| do roofs | ... | ... | ... | ... | ... | ... | 196 |
| do eaves gutters | ... | ... | ... | ... | ... | ... | 86 |
| do fallpipes | ... | ... | ... | ... | ... | ... | 38 |
| do yard pavements | ... | ... | ... | ... | ... | ... | 42 |
| do plasterwork | ... | ... | ... | ... | ... | ... | 62 |
| Miscellaneous minor defects | ... | ... | ... | ... | ... | ... | 210 |
| Insufficient water supply | ... | ... | ... | ... | ... | ... | 6 |
| Offensive accumulations | ... | ... | ... | ... | ... | ... | 16 |
| Nuisances from animals | ... | ... | ... | ... | ... | ... | 4 |
| Insufficient water supply to water closets | ... | ... | ... | ... | ... | ... | 4 |
| Defective soil pipes | ... | ... | ... | ... | ... | ... | 2 |
| do flush pipes | ... | ... | ... | ... | ... | ... | 12 |
| do cisterns | ... | ... | ... | ... | ... | ... | 16 |
| do water closet pedestals | ... | ... | ... | ... | ... | ... | 15 |
| do ashpits | ... | ... | ... | ... | ... | ... | 17 |
| do pans | ... | ... | ... | ... | ... | ... | 11 |
| Defective or blocked drains | ... | ... | ... | ... | ... | ... | 97 |
| do sinks | ... | ... | ... | ... | ... | ... | 5 |
| do sink waste pipes | ... | ... | ... | ... | ... | ... | 14 |

(1) Inspection of Factories, Workshops and Workplaces.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

| Premises | Inspections | Number of | | Occupiers |
|--|-------------|-----------------|-----|----------------|
| (1) | (2) | Written Notices | (3) | Prosecuted (4) |
| Factories (including Factory Laundries) ... | 74 | ... | — | ... |
| Workshops (including Workshop Laundries) | 143 | ... | 1 | ... |
| Workplaces (other than Outworkers' premises) | 61 | ... | 1 | ... |
| Totals | *278 | ... | 2 | ... |

(2) Defects found in Factories, Workshops and Workplaces.

| Particulars | Number of Defects | | | Number of Offences in respect of which Prosecutions were Instituted |
|--|-------------------|----------|----------------------------|---|
| | Found | Remedied | Referred to H.M. Inspector | |
| (1) | (2) | (3) | (4) | (5) |
| <i>Nuisances under the Public Health Acts:—*</i> | | | | |
| Want of cleanliness | 9 | 9 | — | — |
| Want of ventilation | — | — | — | — |
| Overcrowding | — | — | — | — |
| Want of drainage of floors | — | — | — | — |
| Other Nuisances | 10 | 7 | — | — |
| <i>Sanitary Accommodation—</i> | | | | |
| Insufficient | — | — | — | — |
| Unsuitable or defective | 9 | 8 | — | — |
| Not separate for sexes | — | — | — | — |
| <i>Offences under the Factory and Workshop Acts:—</i> | | | | |
| Illegal occupation of underground bakehouse (s101) | — | — | — | — |
| Other offences | — | — | — | — |
| (Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921). | | | | |
| Total | 28 | 24 | — | — |

* Most of the Slaughter-houses and Offensive Trade Premises are either Factories or Workshops. Frequent visits are paid to these premises but the inspections are not included in this figure.

SPECIAL CLASSES of PREMISES and OCCUPATIONS SUBJECT to CONTROL by the LOCAL AUTHORITY.

Slaughter Houses. There are 22 slaughter-houses in the Borough, three less than last year. These premises are under constant supervision and are kept in a satisfactory condition.

Offensive Trades. There was one addition to the number of offensive trades carried on with the permission of the Local Authority during the year. This was the trade of soap boiler, carried on on premises where the 'cold' process of soap making had been carried on for some years.

There are now 10 offensive trade premises in the Borough, as follows—

| | | | | |
|--------------------------------|-----|-----|-----|---|
| Tripe Boiling | ... | ... | ... | 4 |
| Tripe Boiling and Gut Scraping | | | ... | 1 |
| Gut Scraping | ... | ... | ... | 1 |
| Fat Boiling | ... | ... | ... | 1 |
| Soap Boiling | ... | ... | ... | 1 |
| Hide and Skin Factors | ... | | ... | 2 |

Common Lodging Houses. There are three common lodging houses in the Borough providing accommodation for 121 single men. Two of these houses are old and not suitable for use as common lodging houses and the beds are never fully occupied but the third is a model lodging house run by the Quayside Mission and the demand for beds exceeds the supply. Several houses in the Borough, accommodating approximately 70 men are being used as lodging houses but they do not come under the definition of common lodging houses. The Health Committee has had under consideration during the year the question of the provision of a municipal common lodging house but so far no action has been taken. There is no doubt that a good many men would be attracted by comfortable and clean accommodation in a municipal lodging house run by a competent staff.

Houses let in Lodgings. The houses on the register of houses let in lodgings are constantly changing and great difficulty is experienced in keeping them under observation. The standard of overcrowding provided in the 1935 Housing Act will no doubt do much to improve the conditions obtaining in many of these houses by reducing the number of persons allowed to occupy the various rooms.

Tents, Vans, Sheds, etc. Strict observance of the bye-laws by the occupants of caravans entering the Borough is insisted upon.

Schools. During the past few years all school departments have been brought up-to-date in the matter of sanitary conveniences. All school departments in the Borough are now fitted with modern installations and are provided with an abundant supply of water from the Tees Valley Water Board's mains.

During the year 486 children were excluded from school on account of infectious disease. 214 of these were actual sufferers and 272 were contacts. No school or department was closed during the year on account of infectious disease.

Shops. 14 shops which had been referred to the Department by the Shops Act Inspector, were inspected and found to have unsuitable or insufficient sanitary conveniences. Certificates of exemption from the provisions of sub-section (2) of Section 10 of the Shops Act, 1934, were granted in seven cases and notices were served requiring the provision of sufficient conveniences in seven cases. These notices were complied with.

Smoke Abatement. Complaints were received during the year of nuisance caused by smoke from a factory chimney. Several interviews have taken place with the managing director of the factory and every effort was made on his part to mitigate the nuisance but without result. Experiments are still proceeding and it is hoped that ultimately a solution of the difficulty will be found.

Swimming Baths and Pools. A swimming bath is provided in the Borough by the Corporation. The bath is old but during recent years a considerable amount of work has been done to improve the accommodation and a chlorine filtration plant has been installed with satisfactory results.

SECTION D.—HOUSING.

Slum Clearance. Clearance Orders in respect to the whole of the Clearance Areas included in the five-years' programme had been confirmed by the Minister of Health by the end of May, 1935. This programme, as amended, consisted of 25 clearance areas, involving 722 houses, 840 families and 3279 persons.

These areas were dealt with as follows:—

| | Houses | Families | Persons |
|---|--------|----------|---------|
| (1) North and South Riverside Areas ... | 275 | 336 | 1363 |
| (2) John Street, Shakespeare Street, Commercial Street and 8 small areas in the South-East Ward ... | 278 | 324 | 1256 |
| (3) Ropery Street, Thomas Street, Laing Street and 3 small areas in West-End Ward ... | 56 | 59 | 200 |
| (4) William Street and York Street Areas... | 113 | 121 | 460 |
| Totals | 722 | 840 | 3279 |

The North and South Riverside Areas were confirmed in regard to 138 houses—55 houses being excluded from the areas as forming part of a new road scheme and 82 were excluded on the owners undertaking to recondition them. All the other areas were confirmed except for five houses and one other building. One of these houses was excluded unconditionally, four were excluded on condition that they would not be used for human habitation—three of these are being dealt with under Section 19 and one under Section 20 of the Housing Act, 1930.

Up to the time of writing the owners of 31 of the 82 houses excluded from the North and South Riverside Areas have intimated that they do not propose to proceed with the reconditioning of the houses and formal action is therefore being taken under Section 19 in these cases.

Action has been taken, or is proposed, in regard to the following individual unfit houses :—

| | | | | |
|---|-----|-----|-----|-----------------|
| Where undertakings to reconstruct are not being proceeded with | ... | ... | ... | 31 |
| Houses excluded from Clearance Areas on the owners undertaking not to use them for human habitation | ... | ... | ... | 3 |
| Houses where the cost of carrying out repairs under Section 17 was considered unreasonable | ... | | | 10 |
| Individual unfit houses outside Clearance Areas already dealt with | ... | ... | ... | 1 |
| Individual unfit houses still to be dealt with | ... | | | 66 |
| Total | | | | <hr/> 111 <hr/> |

These 111 houses are occupied by 113 families, making the total number of houses required to re-house the families included in the slum clearance programme 765.

Re-housing. Contracts have been entered into for the erection of a total of 689 houses for the re-housing of these families. Up to the end of March, 1936, 243 of these houses have been completed and occupied, the whole of the families from the North and South Riverside Areas and 83 families from other areas and individual unfit houses, having been re-housed. The work on the remainder of the contracts is well advanced and the re-housing of the families is proceeding.

Disinfestation. The furniture and effects of all families to be re-housed is disinfested before being placed in the new houses. The contents of the houses are packed in special containers in the morning and removed to the disinfestation plant, where they are treated with Hydrocyanic Gas, and returned to the new house in the evening. The bedding is removed at the same time to the steam disinfecting plant at the Isolation Hospital and is disinfested with superheated steam, in order to avoid the danger of the incomplete elimination of Hydrocyanic Gas from bedding which is to be used the same night.

The families are accommodated during the day in houses set aside for the purpose on the new housing estate. These houses are equipped with necessary articles of furniture, cooking utensils, etc.

Action under Section 17. Inspection of houses under Section 17 of the Housing Act, 1930, continued during the year, 273 notices being served for the repair and re-conditioning of houses. These notices require the provision, where necessary, of sinks with water supply over, foodstores, washing accommodation and separate water closets, the insertion of damp-proof courses, improved lighting and ventilation, the relaying of floors and yard pavements, and the general overhauling of the premises. Much good work is being done in the Borough under this Section and a considerable improvement is being effected in the standard of accommodation provided in much of the older property.

Housing Act, 1935. This Act came into force on August 2nd, 1935. It deals mainly with the question of the prevention and abatement of overcrowding in houses occupied by the working-classes. Local Authorities were required to make an inspection of their areas with a view to ascertaining what dwelling-houses were overcrowded and to prepare and submit a report to the Minister of Health showing the result of the inspection and the number of new houses required to abate the overcrowding.

The Act provides a standard for the measurement of overcrowding and subject to suitable safeguards for persons already living under overcrowded conditions, makes it a punishable offence to infringe that standard. The standard of overcrowding laid down by the Minister is as follows—

- (1) There must be sufficient sleeping accommodation in a house to secure proper sex separation.
- (2) Is a standard of capacity and in conjunction with Tables I and II fixes, in relation to the accommodation in any particular house, the maximum number of persons, irrespective of sex, which may be permitted to sleep in that house at one time.

TABLE I.

| Where a house consists of : | | The permitted No. of Persons is : | |
|-----------------------------|--------------------|-----------------------------------|---|
| (a) | One room ... | ... | 2 |
| (b) | Two rooms ... | ... | 3 |
| (c) | Three rooms ... | ... | 5 |
| (d) | Four rooms ... | ... | $7\frac{1}{2}$ |
| (e) | Five rooms or more | ... | 10 with an additional 2 in respect of each room in excess of 5. |

(In using this table a room of less than 50 square feet is not counted as a room.)

TABLE II.

Where a room in a house has a floor area of :

| | | | | |
|-----|--|------|-----|---|
| (a) | 110 square feet or more | ... | 2 | |
| (b) | 90 square feet or more but less than 110 | ... | 1½ | |
| (c) | 70 square feet or more | „ 90 | ... | 1 |
| (d) | 50 square feet or more | „ 70 | ... | ½ |
| (e) | Under 50 square feet | ... | Nil | |

(In the application of these tables, account is only to be taken of rooms which are normally used in the locality either as a living room or as a bedroom.)

In applying Table II each room of the size mentioned is to be reckoned as capable of accommodating the number set out in the table. The 'permitted number' for the house is the aggregate number obtained under this table, or the number given by Table I, *whichever is the smaller*.

In considering the application of the standard in relation to particular families it is to be noted—

- (i) that in the case of a house part of which is sub-let, the rooms occupied by the sub-tenant constitute a separate house.
- (ii) that children between the ages of 1 and 10 years count as half a person and that a child under 1 year of age does not count at all.
- (iii) that apart from the number of persons who may occupy a house there is an overriding condition that the accommodation available for a particular family must be such that no two persons both of 10 years of age or over of opposite sexes, except persons living together as husband and wife, must sleep in the same room.
- (iv) that only rooms normally used in the locality for sleeping or living purposes are counted as rooms, so that bathrooms, sculleries, etc., are not counted as part of the accommodation.



OVERCROWDING SURVEY.

BOROUGH OF STOCKTON-ON-TEES (INCLUDING CORPORATION HOUSES).

FORM "C"

| NUMBER OF "PERSONS" IN FAMILY. | NUMBER OF FAMILIES CONTAINING THE NUMBER OF PERSONS IN THE FIRST COLUMN OCCUPYING DWELLINGS WITH THE PERMITTED NO. SHOWN AT THE HEAD OF THIS COLUMN | | | | | | | | | | | | | | | | | | | | | | FAMILIES. | | | | | |
|--------------------------------------|---|----|-----|-----|-----|------|----|----|-----|------|-----|-----|----|------|------|----|----|----|-----|------|----|-----|-----------|--------------------|------------------|--------|--------------|--|
| | 1 | 1½ | 2 | 2½ | 3 | 3½ | 4 | 4½ | 5 | 5½ | 6 | 6½ | 7 | 7½ | 8 | 8½ | 9 | 9½ | 10 | 10½ | 11 | 11½ | 12 | OVERCROWDED (A) | UNCROWDED (B) | | TOTAL (C) | |
| 1 | 4 | 9 | 177 | 2 | 131 | 1 | - | 7 | 61 | 6 | 4 | 1 | 6 | 193 | - | 1 | 1 | - | 54 | 1 | - | - | 56 | - | 715 | 715 | | |
| 1½ | 2 | - | 4 | - | 13 | - | - | 1 | 1 | - | - | - | - | 4 | - | - | - | - | 2 | - | - | - | - | 2 | 25 | 27 | | |
| 2 | 1 | 8 | 66 | 7 | 415 | - | 1 | 16 | 301 | 19 | 19 | 5 | 13 | 1122 | 5 | 6 | 1 | 1 | 460 | - | - | - | 317 | 9 | 2774 | 2783 | | |
| 2½ | - | 2 | 16 | 2 | 147 | - | - | 6 | 194 | 9 | 6 | 2 | 6 | 461 | 2 | 1 | 1 | 2 | 134 | 2 | - | - | 41 | 18 | 1021 | 1039 | | |
| 3 | - | 1 | 19 | 3 | 140 | - | 4 | 25 | 414 | 14 | 13 | 15 | 18 | 1222 | 10 | 7 | 1 | 4 | 507 | - | - | 1 | 384 | 23 | 2779 | 2802 | | |
| 3½ | - | - | 6 | - | 47 | 23 | - | 14 | 159 | 8 | 6 | 2 | 7 | 367 | 2 | - | - | - | 109 | - | - | - | 60 | 53 | 757 | 810 | | |
| 4 | - | - | 4 | 1 | 60 | 2 | 4 | 25 | 151 | 15 | 19 | 14 | 8 | 845 | 2 | 8 | 4 | 4 | 417 | 1 | - | - | 368 | 67 | 1885 | 1952 | | |
| 4½ | - | - | 1 | - | 30 | - | 1 | 18 | 62 | 9 | 4 | 6 | 2 | 263 | 2 | 3 | 1 | - | 104 | 4 | - | - | 57 | 32 | 535 | 567 | | |
| 5 | - | - | 3 | 1 | 33 | - | 2 | 25 | 70 | 12 | 16 | 11 | 8 | 464 | 3 | 6 | 2 | 1 | 261 | 1 | 1 | - | 193 | 64 | 1049 | 1113 | | |
| 5½ | - | - | - | 1 | 11 | 1 | 1 | 12 | 42 | 5 | 11 | 4 | 10 | 185 | 2 | 6 | 2 | 3 | 82 | - | - | - | 47 | 68 | 357 | 425 | | |
| 6 | - | - | 1 | - | 16 | - | - | 12 | 55 | 9 | 35 | 14 | 39 | 102 | 1 | 3 | 2 | 2 | 152 | - | 1 | 1 | 107 | 93 | 459 | 552 | | |
| 6½ | - | - | - | 1 | 5 | - | - | 5 | 16 | 4 | 13 | 6 | 28 | 52 | - | 1 | - | - | 41 | - | - | - | 26 | 44 | 154 | 198 | | |
| 7 | - | - | - | - | 3 | - | 2 | 7 | 23 | 2 | 10 | 5 | 17 | 49 | 2 | - | 1 | 1 | 51 | - | - | - | 46 | 52 | 167 | 219 | | |
| 7½ | - | - | 1 | - | 2 | - | 2 | 6 | 8 | 1 | 6 | 8 | 7 | 20 | - | - | 1 | 1 | 19 | - | - | - | 12 | 41 | 53 | 94 | | |
| 8 | - | - | - | - | 2 | - | - | 4 | 6 | - | 5 | 3 | 6 | 24 | 1 | - | 2 | 2 | 8 | - | - | 1 | 27 | 50 | 41 | 91 | | |
| 8½ | - | - | - | - | 2 | - | - | 2 | 1 | 2 | 5 | 2 | 4 | 4 | 1 | 1 | 2 | - | 1 | - | - | - | 4 | 23 | 8 | 31 | | |
| 9 | - | - | - | - | - | 1 | - | 1 | - | - | 1 | 1 | 3 | 5 | - | - | 1 | - | - | - | - | - | 8 | 12 | 9 | 21 | | |
| 9½ | - | - | - | - | 1 | - | - | - | - | - | 2 | - | 1 | 3 | 1 | - | - | - | - | - | - | - | 2 | 8 | 2 | 10 | | |
| 10 | - | - | - | - | - | - | - | - | 2 | - | - | - | 1 | - | - | - | - | - | - | - | - | - | 6 | 3 | 6 | 9 | | |
| 10½ | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - | - | 1 | - | - | - | - | - | 2 | 3 | 2 | 5 | | |
| 11 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| 11½ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| 12 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - | 2 | 2 | | |
| DWELLINGS | (A) UNCROWDED | 4 | 9 | 247 | 11 | 846 | 24 | 9 | 112 | 1418 | 97 | 133 | 80 | 162 | 5349 | 32 | 43 | 22 | 21 | 2402 | 9 | 2 | 3 | 1765 | | 12,800 | | |
| | (B) OVERCROWDED | 3 | 11 | 51 | 7 | 212 | 4 | 8 | 74 | 153 | 18 | 42 | 19 | 22 | 38 | 2 | - | 1 | - | - | - | - | - | 665 | | | | |
| | (C) TOTAL | 7 | 20 | 298 | 18 | 1058 | 28 | 17 | 186 | 1571 | 115 | 175 | 99 | 184 | 5387 | 34 | 43 | 23 | 21 | 2402 | 9 | 2 | 3 | 1765 | | | 13,465 | |

Six men were employed temporarily for the purpose of carrying out the survey and a commencement was made on November 11th, 1935, with a 'preliminary survey' to ascertain those houses which were overcrowded and those that were 'possibly' overcrowded, i.e. those which may be overcrowded when the rooms were measured up and Table II applied. Subsequently all the overcrowded and possibly-overcrowded houses were measured up and the survey was completed early in 1936, As a result it was found that 665 families in the Borough were living under overcrowded conditions—607 in privately owned houses and 58 in houses owned by the Corporation.

These families occupied houses as follows—

| | | | |
|---|-------------------------------------|-----|-----|
| Houses occupied by one family overcrowded | .. | ... | 411 |
| „ „ | two families, one overcrowded | ... | 110 |
| „ „ | two families, both overcrowded | ... | 27 |
| „ „ | two or more families, 3 overcrowded | ... | 5 |
| „ „ | two or more families, 4 overcrowded | ... | 1 |
| „ „ | two or more families, 6 overcrowded | ... | 1 |
| „ „ | two or more families, 7 overcrowded | ... | 1 |
| | | | — |
| Number of houses involved | | | 556 |
| | | | — |

Of the 58 Corporation houses overcrowded, 53 were occupied by one family and 5 by two families.

A summary of the results obtained by the survey, as submitted to the Ministry of Health, is shown in Form 'C' which is reproduced opposite.

To abate the overcrowding revealed by the survey, I estimate that it will be necessary to build 257 houses of the following sizes—

| |
|---------------------------|
| 28 three-bedroomed houses |
| 213 four-bedroomed houses |
| 16 five-roomed houses |
| — |
| 257 |
| — |

If these houses were provided and suitable tenants transferred to them, the houses so vacated would be sufficient to accommodate the remainder of the overcrowded families without overcrowding.

To be successful such a scheme will necessitate the co-operation of the owners of the private houses concerned.

In order to prevent houses becoming overcrowded in the future, the Act provides that after a date to be fixed by the Minister of Health, overcrowding will become a punishable offence. By that date the 'permitted number' of persons allowed to occupy any particular house must be inserted, in the prescribed form, in the rent book. The 'permitted number' for any house must be supplied to an owner or occupier by the Local Authority on application and in order that this information should be available when required the six temporary men referred to above continued with this work when the overcrowding survey had been completed.

New Houses. 623 new houses were erected in the Borough during the year 1935. 278 of these were erected by the Local Authority—183 for slum clearance under the Housing Acts.

HOUSING STATISTICS FOR THE YEAR 1935.

1. Inspection of Dwelling-houses during the year :—

- | | | |
|---|--------|-----|
| (1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) | ... | 894 |
| (b) Number of inspections made for the purpose | .. | 894 |
| (2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 | ... | 376 |
| (b) Number of inspections made for the purpose | ... | 376 |
| (3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation | ... .. | 1 |
| (4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation | ... .. | 375 |

HOUSING STATISTICS—continued.

2. **Remedy of Defects during the year without service of Formal Notices.**

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers 531

3. **Action under Statutory Powers during the year.**(A) **Proceedings under Section 17, 18 & 23 of the Housing Act, 1930.**

(1) Number of dwelling-houses in respect of which notices were served requiring repairs 273

(2) Number of dwelling-houses which were rendered fit after service of formal notices :—

(a) by owners 48

(b) by Local Authority in default of owners ... —

(B) **Proceedings under the Public Health Acts.**

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied 42

(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—

(a) by owners 43

(b) by Local Authority in default of owners ... —

(C) **Proceedings under Sections 19 and 21 of the Housing Act, 1930.**

(1) Number of dwelling-houses in respect of which Demolition Orders were made 1

(2) Number of dwelling-houses demolished in pursuance of Demolition Orders —

(D) **Proceedings under Section 20 of the Housing Act, 1930.**

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ... —

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ... —

SECTION E.—INSPECTION AND SUPERVISION OF FOOD.

Milk Supply. At the end of the year 1935 there were 137 names on the register of retail purveyors of milk. The number is made up as follows :—

107 Milkshops and Dairies.

12 Dairies in connection with cowsheds.

18 persons who retail milk in the Borough from outside Dairies.

These milkshops have been regularly inspected and are kept in satisfactory condition.

There are 26 cowkeepers in the Borough, the number of cows on these farms being approximately 500.

In connection with the Milk Marketing Board's Accredited Milk Scheme, five milk producers were registered for the production of Grade A milk during the year, making six such producers in the Borough. Each of these farms is provided with a new dairy fitted with a modern steam sterilizer, appliances for cooling the milk and for washing bottles and utensils. The farm premises are, on the whole, of fairly up-to-date construction and the farmers now attach more importance to keeping the cowsheds and animals in a cleanly condition. This has been mainly due to personal supervision, talks, etc., to the owners and cow-hands and to the regular taking of samples for bacteriological examination.

The results of these bacteriological examinations show whether due care has been taken to maintain the animals, byres, utensils, etc., in a cleanly condition and whether due care has been taken in the handling of the milk.

Special copies of the main provisions of the Milk and Dairies Order, and also large copies of special instructions as to the production of clean milk, were printed on stiff cardboard and issued to the farmers to hang in their dairies and byres.

A copy of the Bacteriologist's report on each sample of milk taken is sent to the farmers concerned who take a keen interest in the results. Special attention has been given to this branch of the work and Stockton may be congratulated on its good milk supply, most of the farms are now producing milk with bacterial counts equal to Grade A milk.

There were 74 samples of milk taken for bacteriological examination during the year 1935, including eight which were sent for examination for T.B. only. Of the remainder 14 samples were of pasteurised milk and five were taken from producers from outside the Borough. Of the pasteurised milk, although the total bacterial count was a low one, bacillus coli was found to be present in nine instances.

The results of the bacteriological examination of the 47 samples taken from producers in the Borough were as follows:—

| | | | | | |
|--|---|---|---|---|----------------------------|
| In 13 samples the total bacterial count was less than 10,000 | | | | | |
| „ 22 | „ | „ | „ | „ | between 10,000 & 50,000 |
| „ 9 | „ | „ | „ | „ | „ 50,000 & 200,000 |
| „ 3 | „ | „ | „ | „ | over 500,000 per c.c. |

In 21 instances bacillus coli was entirely absent; in six instances the organism was present in 1·0 c.c.; in eight instances in 0·1 c.c.; in eight instances in ·01 c.c.; in three instances in ·001 c.c.; and in one sample it was present in ·0001 c.c.

Milk Consumption. An inquiry was made during the month of April, 1936, to ascertain the amount of milk consumed in the Borough. A questionnaire was sent to all the purveyors of milk in the Borough asking for particulars of the daily quantity of milk sold. The result was as follows:—

| | | | |
|------------------------|-----|------|---------------------|
| Sold by retailers | ... | ... | 5734 pints per day. |
| „ „ producer retailers | ... | 7641 | „ „ „ |
| Total | | | 13,375 „ „ „ |

This is equivalent to 0·19 pts. per day per head of the population, or less than a $\frac{1}{4}$ of a pint.

In addition to this quantity, 3040 pints of milk are consumed daily in the elementary schools, this being supplied either free or at reduced cost. This brings the total quantity of fresh liquid milk consumed daily in the Borough to 16,410 pints, which is equivalent to 0·25 pints per head of the population.

Approximately 300 pints of dried milk is consumed daily in the Borough.

Tuberculosis in Milk. In four instances samples were taken as result of tubercle bacilli having been found in the milk of a small herd of cows. The affected animal was never traced and it is thought that the animal had been sold during the period of waiting for the result of the first sample of milk.

The Milk (Special Designations) Order, 1923. Six licences, four dealers' licences to sell milk as "Certified," one to sell milk as Grade A, and one pasteuriser's licence to sell milk as "Pasteurised" were granted during the year 1935.

14 samples of pasteurised milk were taken during the year. In 12 instances the bacterial count was well below the standard laid down in the Order but in two cases the standard was considerably exceeded.

The pasteurisation of milk still falls short of the ideal to be attained in the matter of the production of a pure clean milk. The difficult and complicated apparatus and the passage of the milk through its various stages renders certainty of efficient treatment rather dubious. This is proved by the inconsistency of the results of bacteriological examination. The various and large number of sources from which the milk is obtained, the long journeys entailed, the various handlings it is submitted to, and the knowledge on the part of the producers that it going to be pasteurised, give rise to the suspicion that the milk is not clean to start with.

Tuberculosis Order, 1925. During the year 1935, 12 cows on nine premises were reported to be suffering from tuberculosis. On veterinary examination two were certified not to be suffering from tuberculosis and ten were ordered to be slaughtered. The post mortem results showed three to be affected with tuberculosis of the udder, one with tuberculosis emaciation, four with other forms of tuberculosis, one with Johnes Disease and one not affected. Five of the cases of tuberculosis were advanced and three not advanced.

The figures for the year compared with those for the two preceding years are as follows:—

| | 1935 | 1934 | 1933 |
|--------------------------------|------|------|------|
| Cases reported ... | 12 | 9 | 11 |
| No. of animals slaughtered ... | 10 | 8 | 11 |
| Post mortem results:— | | | |
| Tuberculosis of the udder | 3 | 2 | 4 |
| ,, advanced ... | 2 | 3 | 5 |
| ,, not advanced | 3 | 2 | 2 |
| Not tuberculosis ... | 2 | 1 | — |

Meat Inspection. 2,749 visits were paid to slaughter-houses during the year in connection with the inspection of meat under the Public Health (Meat) Regulations, 1924, and 23,580 carcasses were examined.

The following Tables show the work done under the Regulations during the year and the meat condemned as unfit for food.

Table showing the number of animals killed and inspected and the percentage inspected during the year 1935.

| Animals | | Number Killed | Number Inspected | Percentage Inspected |
|---------|-----|---------------|------------------|----------------------|
| Cattle | ... | 4369 | 3832 | 87 |
| Sheep | ... | 13422 | 11330 | 84 |
| Pigs | ... | 9087 | 8091 | 89 |
| Calves | ... | 468 | 327 | 70 |
| Total | | 27346 | 23580 | 86 |

Table showing the Meat condemned by Inspectors during the year, the total number of animals involved and the percentage to the total number of animals killed.

| Animals | | Carcase and Organs | Part Carcase | Organs | Number of Animals Involved | Per- centage to Total Number Killed |
|---------|-----|--------------------------|-----------------|--------|----------------------------------|---|
| Cattle | ... | 5 | 10 | 150 | 96 | 2·19 |
| Sheep | ... | — | 2 | — | 2 | 0·014 |
| Pigs | ... | 4 | 129 | 18 | 135 | 1·48 |
| Calves | ... | 2 | 4 | 5 | 6 | 1·28 |
| Total | ... | 11 | 145 | 173 | 239 | 0·87 |

Table showing the Meat condemned **for Tuberculosis**, the number of animals involved and the percentage to the total number of animals killed.

| Animals | | Carcase and Organs | Part Carcase | Organs | Number of Animals Involved | Per- centage to Total Number Killed |
|---------|-----|--------------------------|-----------------|--------|----------------------------------|---|
| Cattle | ... | 4 | 10 | 128 | 76 | 1·74 |
| Sheep | ... | — | — | — | — | — |
| Pigs | ... | 1 | 129 | 13 | 132 | 1·45 |
| Calves | ... | 1 | 1 | 5 | 2 | 0·42 |
| Total | ... | 6 | 140 | 146 | 210 | 0·76 |

Slaughter of Animals Act, 1933. The provisions of this Act were observed during the year. Three licences were granted to slaughtermen for the year 1935 and 60 licences were renewed.

Inspection of Shops, Stalls and Places where food is prepared. Regular inspections are made of the foods exposed for sale on the stalls in the markets and periodical visits are paid to all premises where foodstuffs are manufactured, prepared, stored or deposited for the purpose of sale. All the premises were kept in a satisfactory condition. One Inspector is on duty in the market on each market day.

The number of visits paid to these premises during the year is shown below :—

| | | | |
|-----------------------|-----|-----|-------|
| Markets and Shops | ... | ... | 1075 |
| Slaughter-houses | ... | ... | 2749 |
| Offensive Trades | ... | ... | 183 |
| Fried Fish Shops | ... | ... | 46 |
| Bakehouses | ... | ... | 125 |
| Dairies and Milkshops | ... | ... | 165 |
| Ice Cream Shops | ... | ... | 35 |
| | | | <hr/> |
| | | | 4378 |
| | | | <hr/> |

Other Foods. During the year the undermentioned foodstuffs were submitted for examination, condemned as unfit for food and destroyed :—

4 stones Frozen Beef.
 One 12 lb. tin Ham.
 One 4 lb. tin Duck and Ham.
 One 6 lb. tin Tongue.
 2 Tins Lunch Tongue.
 6 Couple Rabbits.
 10 Kegs Pears.
 One stone Apples.
 24 stones Codfish.

Action taken under the Food and Drugs (Adulteration) Act, 1928.
 During the year 1935, 50 samples were taken under the provisions of the above Act and submitted to the Public Analyst for analysis. This number was made up as follows :—

| | | | | |
|-----------------------|-----|-----|-----|-------|
| Milk | ... | ... | ... | 30 |
| Butter | ... | ... | ... | 4 |
| Margarine | ... | ... | ... | 2 |
| Potted Meat | ... | ... | ... | 2 |
| Brawn | ... | ... | ... | 2 |
| Pine Honey | ... | ... | ... | 1 |
| Vinegar | ... | ... | ... | 1 |
| Beef Sausage | ... | ... | ... | 1 |
| Lemon Curd | ... | ... | ... | 1 |
| Ham and Chicken Roll | ... | ... | ... | 1 |
| Pig's Cheek | ... | ... | ... | 1 |
| Bacon | ... | ... | ... | 1 |
| Milk Chocolate Wafers | ... | ... | ... | 1 |
| Pork Sausage | ... | ... | ... | 1 |
| Lard | ... | ... | ... | 1 |
| | | | | <hr/> |
| | | | | 50 |
| | | | | <hr/> |

Five samples of milk were found to be slightly below standard in fat. The sample of milk chocolate wafers was found to contain Boric Acid to the extent of 8.05 grains per lb. One case of these, the total amount in the possession of the wholesalers, was destroyed. All the other samples were certified to be of genuine quality.

Chemical and Bacteriological Examination of Food. The chemical analysis of samples is carried out by the Public Analyst for the County of Durham, at Darlington, while the bacteriological examination of samples is carried out at the Public Health Laboratory of the University of Durham College of Medicine at Newcastle-on-Tyne.

Nutrition. Year by year in these annual reports I have stressed the importance to health of adequate and optimum nutrition. The people of this country is becoming conscious of the fact that optimum nutrition is closely associated with the maintenance of health and the public conscience is stirring uneasily as it becomes more and more widely recognised that optimum nutrition is beyond the financial reach of a large proportion of families.

Much confusion has arisen owing to the fact that some people use the term 'malnutrition' to indicate a general shortage of food intake. This narrow interpretation of the word is incorrect; for an individual may eat a sufficiency of food but if some essentials of a complete diet are lacking a state of malnutrition must inevitably result.

I make no apology for yet again emphasizing the importance of nutrition or for reiterating the statement that a large proportion of the populace is inadequately and incompletely nourished. These statements are not made lightly and they should be taken seriously. Investigations which have been made in Stockton-on-Tees show that ignorance of food values and incapacity of housewives plays but a trifling part in the causation of inadequate nutrition. The root of the matter is inadequate purchasing power. The public conscience should not be salved by vague statements that inadequate nutrition is caused by ignorance of the housewives. Such statements are largely untrue and are unfair to a large body of women which by hard work and bitter experience has attained a high measure of domestic efficiency.

The British Medical Association Nutrition Committee's scales of minimum dietaries were widely criticised as inadequate. It was not then generally realised, as it is to-day, that somewhere in the region of 20,000,000 people in this country have to subsist on diets which, according to the British Medical Association Committee's scale, are inadequate.

Local investigations indicate that there is a relationship between fatality rates and adequacy of diet.

Malnutrition cannot be assessed by weighing individuals. A person of normal weight or even overweight may be malnourished.

An example may make this clear. In past times when sailing ships made voyages of many weeks duration scurvy caused much ill-health and many deaths. Scurvy is a disease due to shortage of Vitamin C. This vitamin is present in most fresh fruits and vegetables. Prolonged deprivation of fresh foodstuffs caused the death of many sailors in the past. These sailors may at death have been of normal weight but they died of malnutrition just as surely as if they had been deprived of all food.

Experiments with small animals have shown that many diseases and much ill health can be caused by incomplete nutrition and that these conditions can be prevented by nutritional means.

Recognition of the fundamentally important part played by nutrition in the maintenance of health and in the prevention of disease constitutes a signal advance in the science of Public Health.

SECTION F.—PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

Scarlet Fever. A microscopic germ, known as the hæmolytic streptococcus, causes scarlet fever and also numerous other human ills. For a period of approximately two years this germ has been common in Stockton-on-Tees and throughout the North of England. The widespread local distribution of this organism has been evidenced by an epidemic of scarlet fever. At times the number of cases of this disease notified by medical practitioners taxed severely the accommodation at the isolation hospital.

Cases of this disease were scattered throughout the whole town and occurred sporadically. It was not possible to trace the source of infection in more than a small number of cases. This is not surprising, for the causal germ can and does cause conditions such as sore throat which give rise to cases of scarlet fever in other individuals.

It is probable that the whole of the local population has, during the past two years, been infected with this particular germ. In a large proportion of individuals no illness manifested itself for bodily resistance overcame the attack. In others true scarlet fever developed; many were afflicted with sore throat but not with scarlet fever.

The epidemic of scarlet fever has subsided but certain ill effects of the recent general prevalence of the causal germ are, and will continue to be, manifest.

The same germ which causes scarlet fever and sore throat is responsible for much rheumatism. Though no actual or detailed figures are available inquiries indicate that there has recently been an increase of rheumatism in the town. This was expected.

A proportion of children afflicted with rheumatism develop incurable heart disease. These children are greatly handicapped for they are unable to take a full share in normal activities and many of them die many years before they reach middle age. These early deaths must be attributed to infection by the streptococcus during the periods when sore throats and scarlet fever are prevalent.

It is a popular belief that dampness is a cause of rheumatism. Dampness, per se, does not cause rheumatism but it may exacerbate the trouble when it is established.

During periods when the germ is widespread there are no effective measures for preventing infection. A high degree of bodily resistance to the organism constitutes our greatest safeguard. This resistance appears to be in part, at least, linked with the nutritional state of the individual.

During the year there were 307 cases of scarlet fever notified, compared with 658 during the year 1934. The case-rate for the year was 4·5 per 1000 of the population, compared with 2·96 the rate for England and Wales and 3·19 the average rate for the 121 County Boroughs and great towns. There were no deaths from the disease during the year. Information in regard to complications and duration of stay in hospital is given in the section of the report dealing with the Isolation Hospital.

Diphtheria. 72 cases of Diphtheria were notified during the year compared with 36, the number for the year 1934, and there were four deaths from the disease. The case-rate per 1000 of population was 1·07, compared with 1·60 for England and Wales and 1·96 for 121 County Boroughs and great towns. Information in regard to the administration of diphtheria anti-toxin is given in the section of the report dealing with the Isolation Hospital.

Pneumonia. The number of cases of Pneumonia notified during 1935 was 107, a decrease of 21 on last year's figure, while the number of deaths was 73, an increase of one on the number of deaths during the year 1934. The case-rate for the Borough was 1·6 per 1000 of population, compared with 1·15 and 1·36, the rates for England and Wales and the 121 County Boroughs and great towns respectively. Home nursing is provided in all cases of pneumonia by the District Nursing Association under agreement with the Corporation. When pressure on the accommodation at the Isolation Hospital will allow, a certain number of selected cases of pneumonia are removed there for treatment. Unfortunately it was only possible to admit two cases during the year 1935.

Non-notifiable Infectious Diseases. Cases of measles, whooping-cough, chicken-pox, mumps, etc., occurring among school children, are notified to the Department by Head Teachers and School Attendance Officers and the cases are investigated by the School Nurses.

Cases of measles, whooping-cough, epidemic diarrhoea, ophthalmia neonatorum, puerperal fever and pneumonia are visited by a nurse from the District Nursing Association, under agreement with the Corporation, and if necessary, nursing assistance is provided.

Disinfection. All bedding, clothing, etc., from infected houses is removed to the Isolation Hospital and disinfected by super-heated steam. Infected premises are disinfected with a formalin spray. During the year 434 premises were disinfected. Disinfectants are provided free for home use.

In addition to the above 118 houses which had become infested with vermin were disinfected with a special insecticide, with good results.

Bacteriological Examinations. The following specimens were sent by medical practitioners in the Borough for bacteriological examination during the year 1935:—

| Disease Suspected | No. of Specimens Submitted | Number Positive | Number Negative |
|-------------------|----------------------------|-----------------|-----------------|
| Diphtheria ... | 60* | 22 | 38 |
| Enteric Fever ... | 2 | — | 2 |
| Tuberculosis ... | 146 | 18 | 128 |
| Totals | 208 | 40 | 168 |

*10 of these—8 positive and 2 negative—were taken from one patient at intervals over a period of three months.

The following specimens were submitted from patients in the Isolation Hospital for bacteriological examination during the year:—

| | | |
|-----------------|-----------|--------------|
| Diphtheria | Total 428 | Positive 145 |
| Faeces Specimen | „ 1 | |
| Urine | „ 3 | |

NOTIFIABLE DISEASES DURING THE YEAR 1935.

| DISEASE | AGE PERIODS | | | | | | | | | | | | | Cases Admitted to Hospital | DEATHS | | | | | | | | | | | | |
|--|-------------------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|-------------------|-------------------------|-------------------------------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|-------------------|-------|-----|
| | Un- der 1 year | 1 to 2 | 2 to 3 | 3 to 4 | 4 to 5 | 5 to 10 | 10 to 15 | 15 to 20 | 20 to 35 | 35 to 45 | 45 to 65 | 65 and over | Un- der 1 year | | 1 to 2 | 2 to 3 | 3 to 4 | 4 to 5 | 5 to 10 | 10 to 15 | 15 to 20 | 20 to 35 | 35 to 45 | 45 to 65 | 65 and over | Total | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SMALL-POX ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| SCARLET FEVER ... | 1 | 14 | 12 | 26 | 32 | 121 | 46 | 19 | 27 | 5 | 4 | ... | 301 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| DIPHTHERIA ... | ... | ... | 2 | 7 | 5 | 30 | 17 | 3 | 6 | 2 | ... | ... | 65 | ... | ... | ... | ... | 4 | ... | ... | ... | ... | ... | ... | ... | 4 | |
| ENTERIC FEVER (including Paratyphoid) | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| PUERPERAL FEVER ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | |
| PUERPERAL PYREXIA | ... | ... | ... | ... | ... | ... | ... | ... | 6 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| PNEUMONIA ... | 5 | 6 | 4 | 6 | 8 | 18 | 7 | 10 | 19 | 6 | 17 | 1 | 2 | 19 | 8 | 1 | 3 | ... | 1 | ... | 3 | 4 | 2 | 22 | 11 | 74 | |
| CEREBRO SPINAL FEVER | 1 | ... | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | |
| ERYSIPELAS ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | 6 | 15 | 6 | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | 2 | |
| ENCEPHALITIS LETHARGICA... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | |
| TOTALS ... | 7 | 20 | 20 | 40 | 45 | 169 | 71 | 32 | 60 | 21 | 36 | 7 | 373 | 20 | 8 | 1 | 3 | ... | 5 | ... | 3 | 5 | 3 | 23 | 12 | 83 | |

ISOLATION HOSPITAL.

The following table shows the number of admissions to the Isolation Hospital from the different districts catered for during the year 1935.

| Disease | | Total | Borough of Stockton | Urban District of Billingham | Rural District of Stockton |
|-----------------------------|-----|-------|---------------------------|------------------------------------|----------------------------------|
| Scarlet Fever | ... | 408 | 301 | 69 | 38 |
| Diphtheria | ... | 149 | 65 | 70 | 14 |
| Malnutrition, Rickets, etc. | | 18 | 18 | — | — |
| Eczema | ... | 1 | 1 | — | — |
| Erysipelas | ... | 6 | 5 | 1 | — |
| Enteric (for observation) | ... | 1 | 1 | — | — |
| Lobar Pneumonia | ... | 1 | 1 | — | — |
| Measles and Pneumonia | ... | 1 | 1 | — | — |
| Totals | ... | 585 | 393 | 140 | 52 |

Further information with regard to the Isolation Hospital is given below :—

| Disease | No of Cases remaining Dec. 31st, 1934 | No. of Cases admitted 1935 | No. of Cases under Treatment 1935 | No. of Cases Dis- charged | No. of Deaths | Per- centage Mortality | No. of Cases remaining Dec. 31st, 1935 |
|--------------------------------|---|-------------------------------------|---|------------------------------------|------------------|------------------------------|--|
| Scarlet Fever | 106 | 408 | 514 (498) | 491 | 3 (0) | — | 20 |
| Diphtheria | 17 | 149 | 166 (127) | 138 | 9 (8) | 4·81 | 19 |
| Malnutrition, Rickets, etc. | — | 18 | 18 | 13 | 2 | 11·1 | 3 |
| Eczema | — | 1 | 1 | 1 | — | — | — |
| Erysipelas | — | 6 | 6 | 4 | 1 | 16·6 | — |
| Enteric (for observation) | — | 1 | 1 | 1 | — | — | — |
| Lobar Pneumonia | — | 1 | 1 | — | 1 | — | — |
| Measles and Pneumonia | — | 1 | 1 | — | 1 | — | — |
| Totals | 123 | 585 | 708 | 648 | 17 | — | 43 |

The figures in brackets denote the number of actual cases only, and the mortality rates are worked on these figures.

Daily number of Patients in Hospital.

| | | | |
|-----------------------|-----|-------|-----------------------|
| Scarlet Fever—Maximum | ... | 102 | (Jan. 10th) |
| Minimum | ... | 17 | (July) |
| Average | ... | 46·2 | |
| Diphtheria —Maximum | ... | 31 | (Feb. 4th, 7th, 17th) |
| Minimum | ... | 3 | (Oct. 8th) |
| Average | ... | 15·89 | |
| All Patients —Maximum | ... | 127 | (Jan. 20th) |
| Minimum | ... | 26 | (Oct. 1st) |
| Average | ... | 63·94 | |

Notes on Scarlet Fever Cases. In 16 cases admitted to hospital as Scarlet Fever, the diagnosis was revised as follows :—

| | | | |
|-----------------------|-----|-----|---|
| Erythema | ... | ... | 7 |
| Urticaria | ... | ... | 1 |
| Influenza | ... | ... | 1 |
| Tonsillitis | ... | ... | 2 |
| German Measles | ... | ... | 4 |
| Shock following burns | | | 1 |

The maximum number of days spent in hospital was 102.

The minimum do do 16.

The average do do 38·41

Complications. The complications noted on admission were as follows :—

| | | | | |
|--|-----|-----|-----|----|
| Otorrhœa (single) | ... | ... | ... | 11 |
| Adenitis (single 19, double 29) | ... | ... | ... | 48 |
| Submaxillary Adenitis | ... | ... | ... | 1 |
| Heart Complications (mitral systolic murmur) | | | | 2 |
| Rhinitis... | ... | ... | ... | 6 |

The following complications occurred after admission :—

| | | | |
|------------------------------------|-----|-----|----|
| Otorrhœa (single 19, double 2) | ... | ... | 21 |
| Adenitis (single 46, double 17) | ... | ... | 63 |
| Tonsillitis | ... | ... | 25 |
| Arthritis | ... | ... | 14 |
| Conjunctivitis | ... | ... | 2 |
| Mastoidectomy (single 3, double 1) | ... | ... | 4 |
| Suppurating Adenitis (incised) | .. | ... | 3 |

Heart Complications :—

| | | | |
|--|-----|-----|----|
| Dilatation | ... | 2 | |
| Irregular action | ... | 11 | |
| Mitral systolic murmur | 16 | | 29 |
| Nephritis (Albuminuria 9, Hæmaturia 7) | ... | | 16 |
| Stomatitis | ... | ... | 1 |
| Aural paracentesis | ... | ... | 2 |
| Rhinitis... | ... | ... | 94 |
| Serum rash | ... | ... | 6 |
| Vaginitis | ... | ... | 1 |

Twelve patients had scarlet fever rashes on the 5th, 7th, 8th, 9th, 13th, 16th, 17th, 18th, 19th, 20th and 24th days and in 7th week respectively. Previous desquamation indefinite.

One patient had varicella as well as scarlet fever on admission, and five patients developed varicella on the 8th, 10th, 20th, 21st and 30th days respectively.

Two patients had diphtheria as well as scarlet fever.

Two patients notified as diphtheria were scarlet fever; throat swabs **negative**.

One patient notified as scarlet fever was diphtheria; no rash; no desquamation.

One scarlet fever patient was removed on 19th day to Stockton and Thornaby Hospital for appendicectomy.

One patient admitted with scarlet fever and injury to knee before admission was transferred to Stockton & Thornaby Hospital for further treatment to knee on 26th day.

One patient who had definite attack of scarlet fever was discharged on March 29th and re-admitted a week later with second definite attack; desquamated both times.

Fatal Cases. There were no deaths from actual scarlet fever. One child admitted from Stockton & Thornaby Hospital with scalds on foot and leg died 15 hours after admission from shock following scalds. One child admitted as scarlet fever died 24 hours after admission. The cause of death was septicæmia.

35 patients were given 10 c.c. of anti-scarlatina serum each; total 350 c.c.

There were 22 "return cases"—4·24%.

Notes on Diphtheria Cases. In 39 cases admitted to hospital as Diphtheria, the diagnosis was revised as follows:—

| | | | |
|------------------------|-----|-----|----|
| Tonsillitis | ... | ... | 33 |
| Scarlet Fever | ... | ... | 3 |
| Croup | ... | ... | 1 |
| Laryngitis | ... | ... | 1 |
| Foreign body in Larynx | | | 1 |

Two persons were diphtheria "carriers." They had no clinical signs but in one the nose and throat were "positive," and in the other the throat only was "positive."

The maximum number of days spent in hospital was 101

The minimum do do 32

The average do do 48·62

Complications. The complications noted on admission were as follows:—

| | |
|---|----|
| Adenitis (single 5, double 10) | 15 |
| Rhinitis | 3 |

The following complications occurred after admission :—

| | | |
|--------------------------------------|--------|----|
| Pharyngeal Paresis (severe) | ... | 1 |
| Palatal Paresis (severe 4, slight 6) | | 10 |
| Strabismus | ... .. | 3 |
| Serum Rash | ... .. | 13 |
| Rhinitis | ... .. | 1 |
| Adenitis | ... .. | 4 |
| Otorrhœa | ... .. | 2 |
| Otalgia | ... .. | 1 |
| Tonsillitis | ... .. | 5 |

Heart Complications :—

| | | | |
|------------------------|-----|----|----|
| Bradycardia | ... | 4 | |
| Tachycardia | ... | 1 | |
| Cardiac irregularity | | 19 | |
| Mitral systolic murmur | 4 | | 28 |

One patient had abscess on site of serum injection ; incised.

One patient contracted varicella on the 39th day.

Three patients had Trachyotomy performed and made uninterrupted recoveries.

One fatal case had Trachyotomy performed with no relief. The cause of death was Croup.

There were nine fatal cases of Diphtheria. They were in hospital 2, 2, 6, 7, 8, 4, 11 and 42 days and 2 hours respectively. The cause of death of the case which was in hospital 42 days was Diphtheria (1) Toxic encephalitis (2).

One patient admitted in December, 1934 died in Jany., 1935.

70 patients had A.D. serum. The average dose was 18,500 units and the total was 1,300,000 units.

Notes on Enteric Fever Cases. Only one case was admitted for observation. The urine and faeces were both negative and the patient was in hospital for 9 days.

Notes on Erysipelas Cases. Six cases of Erysipelas were admitted. The fatal case was in hospital for 24 hours.

Marasmus, Rickets, etc. There were 18 cases admitted to hospital, 2 of which were fatal. The rest showed marked improvement when discharged.

CANCER.

101 deaths were registered as being due to this disease during the year 1935, an increase of seven on last year's figure. The death-rate from the disease for the year was 1·50 per 1000 of population, compared with 1·39 and 1·16, the average rates for the five-year periods 1931-35 and 1926-30.

In the following table the deaths from the disease are shown according to the sex and age period and according to the site affected.

| Site | MALES | | | | | | FEMALES | | | | | | Total Deaths |
|-----------------------------|---------------|---------------|---------------|---------------|-------------------|-------|---------------|---------------|---------------|---------------|-------------------|-------|--------------|
| | 25 — 35 | 35 — 45 | 45 — 55 | 55 — 65 | 65 and over | Total | 25 — 35 | 35 — 45 | 45 — 55 | 55 — 65 | 65 and over | Total | |
| | | | | | | | | | | | | | |
| Buccal Cavity and Pharynx | — | — | — | 2 | 2 | 4 | — | — | — | — | — | — | 4 |
| Digest. Organs & Peritoneum | — | — | 6 | 15 | 11 | 32 | — | — | 5 | 6 | 16 | 27 | 59 |
| Respiratory Organs | — | — | 3 | — | — | 3 | — | — | — | — | — | — | 3 |
| Uterus | — | — | — | — | — | — | — | 1 | 7 | 1 | 2 | 11 | 11 |
| Other Female Genital Organs | — | — | — | — | — | — | — | — | — | 2 | 1 | 3 | 3 |
| Breast | — | — | — | — | — | — | 1 | — | 1 | 4 | 3 | 9 | 9 |
| Male genito-urinary organs | — | 1 | 1 | 1 | 2 | 5 | — | — | — | — | — | — | 5 |
| Other Sites | 1 | — | — | 1 | 2 | 4 | — | 1 | — | — | 1 | 2 | 6 |
| Totals | 1 | 1 | 10 | 19 | 17 | 48 | 1 | 2 | 13 | 13 | 23 | 52 | 100* |

* The Registrar General's figure is 101—

PREVENTION OF BLINDNESS.

No action was taken during the year under Section 66 of the Public Health Act, 1925, for the prevention of blindness or for the treatment of persons suffering from any disease or injury of the eyes.

TUBERCULOSIS.

The following table shows the number of new cases notified or coming to the notice of the Medical Officer of Health and the number of deaths from the disease during the year 1935.

| Age Periods | New Cases. | | | | | | | Deaths. | | | | | | |
|----------------|------------|----|------|-------------------|----|------|-----------------------|-----------|----|------|-------------------|---|------|----------------|
| | Pulmonary | | | Non- Pulmonary | | | Total New Cases | Pulmonary | | | Non- Pulmonary | | | Total D'ths |
| | M | F | Tot. | M | F | Tot. | | M | F | Tot. | M | F | Tot. | |
| 0-1 | — | — | — | — | — | — | — | — | 1 | 1 | — | — | — | 1 |
| 1-5 | 1 | 2 | 3 | — | 4 | 4 | 7 | 1 | 2 | 3 | — | 1 | 1 | 4 |
| 5-10 | 2 | — | 2 | 5 | 2 | 7 | 9 | — | 1 | 1 | — | 3 | 3 | 4 |
| 10-15 | 3 | 4 | 7 | 5 | 3 | 8 | 15 | 1 | 1 | 2 | — | — | — | 2 |
| 15-20 | 2 | 4 | 6 | 1 | — | 1 | 7 | — | 4 | 4 | 1 | — | 1 | 5 |
| 20-25 | 5 | 6 | 11 | 1 | — | 1 | 12 | 2 | 3 | 5 | 1 | — | 1 | 6 |
| 25-35 | 6 | 3 | 9 | 1 | 2 | 3 | 12 | 4 | 5 | 9 | 1 | 1 | 2 | 11 |
| 35-45 | 6 | 7 | 13 | 1 | 1 | 2 | 15 | 1 | 4 | 5 | — | — | — | 5 |
| 45-55 | 4 | 4 | 8 | — | — | — | 8 | 4 | 1 | 5 | — | — | — | 5 |
| 55-65 | 5 | 2 | 7 | — | — | — | 7 | 4 | 1 | 5 | — | — | — | 5 |
| 65 & over | 1 | 1 | 2 | — | — | — | 2 | 1 | — | 1 | — | — | — | 1 |
| Totals | 35 | 33 | 68 | 14 | 12 | 26 | 94 | 18 | 23 | 41 | 3 | 5 | 8 | 49* |

* The number of deaths shown on the Registrar General's Return is 50—
Pulmonary 42; Non-pulmonary 8.

There was an increase in the number of cases of pulmonary tuberculosis notified during the year but a decrease in the number of non-pulmonary cases.

In the following table the case rates per 1000 of population for both forms of the disease are shown for the quinquennial period 1926-30 and for years 1931 to 1935.

| Year | Pulmonary | Non-pulmonary | Total |
|---------|-----------|---------------|-------|
| 1926-30 | 1.17 | 0.69 | 1.86 |
| 1931 | 1.20 | 0.80 | 2.00 |
| 1932 | 0.95 | 0.50 | 1.45 |
| 1933 | 1.09 | 0.36 | 1.45 |
| 1934 | 0.77 | 0.49 | 1.26 |
| 1935 | 1.01 | 0.39 | 1.40 |

The above table shows that, during recent years there has occurred a general decline in the number of cases of tuberculosis notified but this decline is more marked among non-pulmonary cases than among pulmonary.

There was a considerable reduction in the number of deaths registered from this disease during the year, the deaths from non-pulmonary tuberculosis being particularly low.

The death-rates from each form of the disease for the year 1935 and for the quinquennial periods 1926-30 and 1931-35, were as follows:—

| Year | Pulmonary | Non-pulmonary | Total |
|---------|-----------|---------------|-------|
| 1926-30 | 0·88 | 0·36 | 1·24 |
| 1931-35 | 0·74 | 0·20 | 0·94 |
| 1935 | 0·62 | 0·11 | 0·73 |

The ratio of non-notified tuberculosis deaths to the total deaths from the disease was 1 to 12·5.

It was not necessary to take action during the year under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or the Public Health Act, 1925, Section 62.

OPHTHALMIA NEONATORUM.

Thirteen cases of this disease were notified during the year. The result of treatment of these cases is shown in the following Table:—

| Number of cases notified. | Cases Treated | | Vision un- impaired. | Vision impaired. | Total Blindness. | Deaths |
|---------------------------------|---------------|-----------------|----------------------------|---------------------|---------------------|--------|
| | at Home. | in Hospital. | | | | |
| 13 | 12 | 1 | 13 | — | — | — |

All the cases treated at home were kept under supervision by nurses from the District Nursing Association until the condition had cleared up.

SECTION G.—MATERNITY AND CHILD WELFARE.

Maternity and Child Welfare Centres. The tables on pages 51 and 52 show that over 27,000 attendances were made at the various clinics during the year. The clinics are held in schoolrooms attached to places of worship, except No. 1 Centre, which is carried on in what was originally a private house.

It is a matter for regret that the town does not possess a model Child Welfare Centre designed and built for the purpose.

The average attendance at most of the clinics is too high to permit of bestowing on each case the time and attention it deserves. The time has come when consideration of this matter should be undertaken by the Committee. More centres are needed to relieve overcrowding and the question of the appointment of an assistant Medical Officer who would undertake some of the work should be considered.

Breast Feeding. The natural food of an infant is its own mother's milk and endeavour is made at the child welfare centres to encourage breast feeding when possible. Many women produce insufficient milk to feed their children and artificial feeding has to be resorted to. The artificial food usually advised at the Stockton clinics is a dried and modified cow's milk. Good results are obtained and the infants thrive satisfactorily but however praiseworthy this success may be one feels strongly that cows milk in any form is not the ideal food for human infants and the question is naturally asked, "Why can not the mother produce sufficient milk to feed her baby?"

More than one factor enters into milk production. The health of the mother no doubt plays a part but the most important single influence is that of diet. Unless a woman receives in her daily diet a sufficiency of the right kinds of food to maintain her in health and, in addition, sufficient to provide the normal constituents of milk, her body cannot produce adequate quantities of milk to nourish her infant. Milk contains protein, fat and carbohydrate and certain minerals, etc.

The amount of protein in a pint of human milk is about 12 grams. The only possible source of this protein is the protein contained in the mother's food. The body cannot convert one unit of protein eaten into one gram of milk protein. It is probable that approximately two grams of protein in food are required to manufacture one gram of milk protein, therefore for the production of one pint of breast milk containing the normal amount of protein 24 grams of protein, over and above the needs of the mother's body, should be contained in her food. Furthermore it is necessary that the protein in the mother's diet should be protein of high quality. Protein of high quality is contained in animal products, meat, fish, cheese, milk, etc. The daily needs of first class protein of a woman are from 30 to 40 grams and if to this quantity the 24 grams required for milk production are added we arrive at the daily needs of a nursing mother of 54 to 64 grams. A baby at certain ages requires more than one pint of milk per day, but if we take one pint only as essential we are faced with the fact that large numbers of mothers cannot afford to buy enough food to meet the needs of their own bodies and of their infants. Analysis of food budgets of the unemployed and lower paid workers shows that the daily quantities of good class protein eaten are below the amount required for satisfactory nutrition. Dairy farmers possess a great deal of practical knowledge on the subject of feeding cows for milk production. When determining the quantity of food required by a cow the cow's maintenance ration is first calculated and then to this is added a known quantity for milk production. If the dairy farmer did not follow this rule his yield of milk would be unsatisfactory. The same general principle is applicable to nursing mothers and the quantities of food of suitable kinds determines, within certain limits, the quantity of milk produced.

Would it be cheaper to give the nursing mother a good dinner each day or to give the child the requisite quantity of milk? The latter is cheaper but the former would be better both for mother and child.

Abortion, Miscarriage and Premature Birth. Pregnancy should terminate at full term in the birth of a living healthy child. Failure to do so may be due to various causes. The expulsion of the products of conception during the early months of pregnancy is

known as abortion. The number of abortions occurring each year is not accurately known, for abortions are not notifiable. It is known that during 1935 midwives or doctors attended 16 abortions and that in three of these cases the woman died, two of them directly from complications of abortion and the third one from the effects of abortion combined with a non-malignant growth in the wall of the uterus.

It is known that other abortions occurred but not how many, for in some cases neither doctor nor midwife was called in. The causes of abortion may be divided into two groups. The first group consists of deliberately procured abortion. It is not known how many of such cases there were. In the absence of accurate figures it would be easy to exaggerate the number so no attempt should be made even to guess at the frequency of this illegal procedure.

Inquiry into cases of suspected deliberate abortions are almost invariably abortive for the fear of legal proceedings prevents information being given.

The second group of abortions contains those which are involuntary. Information is gradually accumulating as to some of the causes of involuntary abortion. One of the causes appears to be associated with nutrition. Unless the mother receives in her diet a sufficiency of the numerous food elements from which the child's body is built up the foetus may die and be expelled from the uterus. One of the food factors directly concerned with the growth of the baby is Vitamin E. Some measure of success has followed an attempt in Stockton-on-Tees to prevent abortions and miscarriages by the use of this vitamin. Through the kindness of the Glaxo Laboratories Limited I was enabled to procure supplies of this substance in 1933 and on pages 49 and 50 will be found a brief account of the results obtained. These results are encouraging and they provide one more indication that the body requires for successful functioning a satisfactory diet.

The use of Calcium in pregnancy. Many mothers, particularly those living at or below the poverty line, complain of muscular cramps during pregnancy. These cramps, which affect most frequently the muscles of the legs, are so severe as to prevent sleep and are a very annoying and painful complication of the ante-natal

period. During its development inside the womb the child needs a considerable amount of mineral calcium. This element it must derive from the mother and unless she obtains in her food a sufficiency of it her own bodily store of the mineral is depleted in order to supply the needs of the growing child. The muscular cramps referred to above are caused by a shortage of calcium in the tissues of the mother and when additional calcium is given her the pains cease. During the past year large numbers of women have gratefully acknowledged the relief they have obtained from painful cramps when receiving at the ante-natal centre a supply of this substance.

The normal daily needs of a woman for calcium has been calculated as approximately one gram. During pregnancy she needs, for herself and her child, double this quantity. She should obtain all she needs in her food but economic circumstances in so many cases render the purchase of a satisfactory diet impossible that the artificial administration of calcium is necessary.

Vitamins A & D in pregnancy. For some years additional vitamins A & D have been supplied through the ante-natal centre to those women who appear to be in need of them. The women are unanimous that they derive considerable benefit therefrom and certainly their general health improves. The women say that they usually have short and easy childbirths following the taking of these vitamins during the ante-natal period.

On many occasions I have written on the subject of malnutrition and of the difficulties in measuring its effects upon the body. There should be no need to give to women the various food constituents referred to above for they should obtain all they require from the food they purchase themselves. The fact that these women benefit from receiving additional calcium and Vitamins A, D and E is definitely indicative that these substances are not present in their diets in adequate quantities. This observation is of some importance for it indicates that sub-optimum nutrition is far from uncommon.

Wheat Germ Extract (Vitamin E). 1933. Seven women attended the ante-natal centre whose last pregnancy had terminated in a miscarriage or abortion and who were anxious for a full time live child. Each of these women was given daily one capsule of the

wheat germ extract. The period during which the daily dose was taken varied from three to six months. In each case a full time live child was born.

1934 and 1935.

| Case No. | Age | Miscarr- iages | Still- births | Live Children | Vitamin E given at | Result | |
|----------|-----|-------------------|------------------|------------------|-----------------------|--------|-------|
| 1 | 30 | 2 | — | — | 2 months | Live | Child |
| 2 | 30 | 2 | — | — | 2 „ | „ | „ |
| 3 | 34 | 1 | — | 6 | 3 „ | „ | „ |
| *4 | 36 | 1 | 1 | 2 | 4 „ | „ | twins |
| *5 | 28 | Mole | — | 2 | 4 „ | „ | child |
| 6 | 31 | 2 | — | 3 | 4 „ | „ | „ |
| 7 | 30 | — | 2 | 2 | 4 „ | „ | „ |
| *8 | 25 | — | — | 2 | 3 „ | „ | „ |
| 9 | 22 | — | 1 | — | 4 „ | „ | „ |
| 10 | 18 | — | Premature | — | 4 „ | „ | „ |
| 11 | 30 | 2 | — | — | 2 „ | „ | „ |
| 12 | 33 | 1 | — | — | 4 „ | „ | „ |
| 13 | — | 1 | — | — | 4 „ | „ | „ |
| 14 | 24 | — | 2 prem. (died) | — | 2 „ | „ | „ |
| 15 | 27 | 1 | 3 | 1† | 3 „ | „ | „ |
| 16 | 18 | 2 | — | — | 3 „ | „ | „ |
| *17 | 30 | — | — | 5 | 2 „ | „ | „ |
| 18 | 36 | 3 | — | 3 | 3 „ | „ | „ |

* Threatened abortion; repeated small haemorrhages.

† Following Vitamin E in 1933.

Maternal Deaths. The number of women who died as a result of pregnancy last year in the Borough was nine.

Three of the nine deaths were caused by abortion leaving six in which child-birth (as distinguished from abortion) was the cause. The three deaths following abortion occurred in the Stockton and Thornaby Hospital to which Institution they were admitted as emergency cases.

Of the six deaths in child-birth one died under an anaesthetic administered during labour, one died as a result of haemorrhage occurring before the child was born, two from haemorrhage after the birth of the child, one from cardiac failure produced by prolonged labour and one from a toxic condition known as eclampsia.

ATTENDANCES AT CENTRES, 1935. TABLE 1.

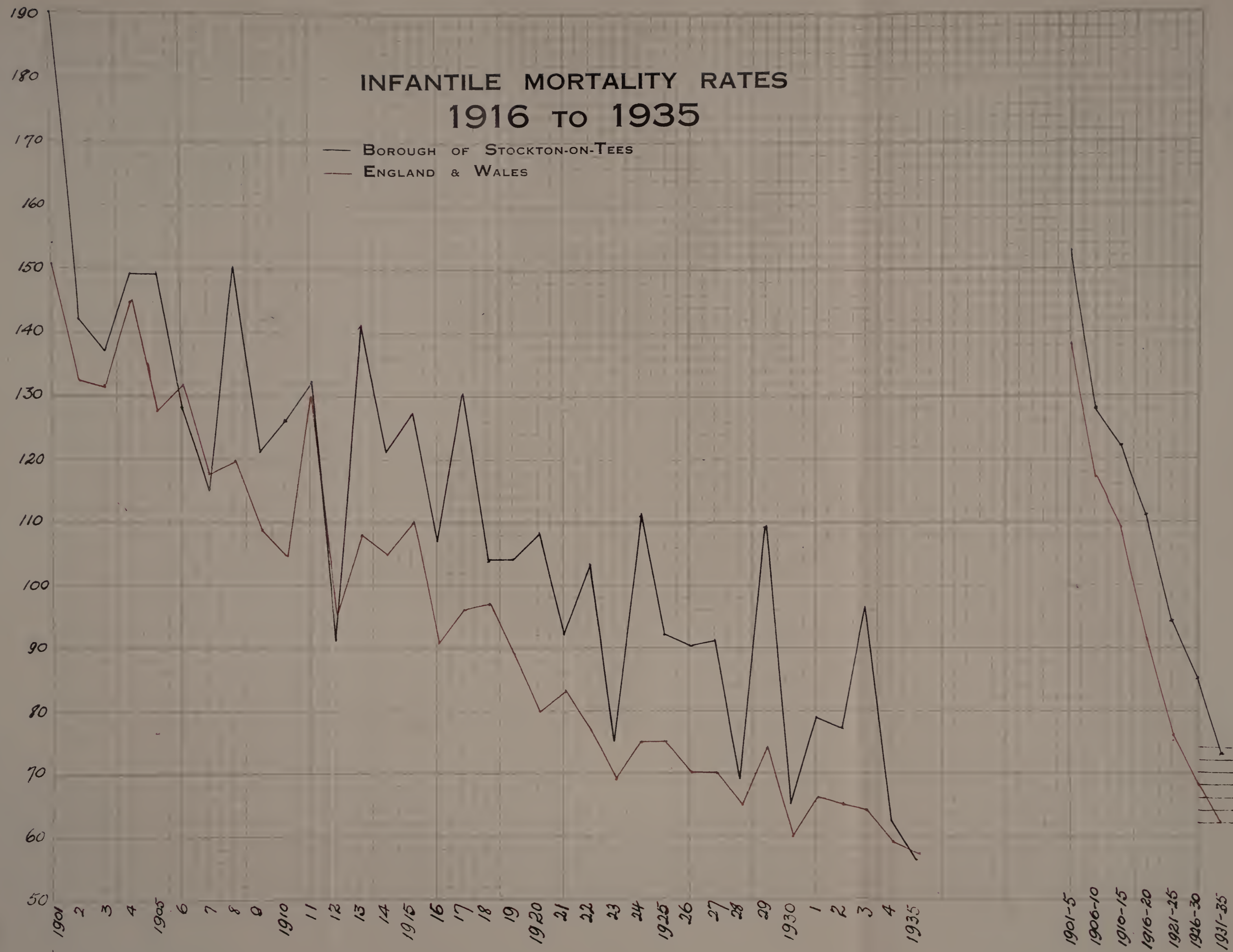
| Months | Centres | | | | | Ante-natal | | Total |
|--------------------------------------|----------|-------|-------|-------|-------|------------|-------|-------|
| | No. 1 | No. 2 | No. 3 | No. 4 | No. 5 | No. 1 | No. 2 | |
| January | ... 406 | 845 | 406 | 326 | 241 | 110 | 27 | 2361 |
| February | ... 359 | 812 | 457 | 269 | 277 | 89 | 35 | 2298 |
| March | ... 335 | 827 | 438 | 245 | 331 | 102 | 38 | 2316 |
| April | ... 293 | 820 | 470 | 167 | 205 | 97 | 28 | 2080 |
| May | ... 467 | 633 | 340 | 313 | 310 | 134 | 16 | 2213 |
| June | ... 370 | 595 | 318 | 226 | 268 | 106 | 25 | 1908 |
| July | ... 507 | 1087 | 500 | 244 | 255 | 122 | 30 | 2754 |
| August | ... 271 | 513 | 244 | 244 | 244 | 143 | 48 | 1707 |
| September | ... 374 | 883 | 515 | 301 | 280 | 104 | 27 | 2484 |
| October | ... 458 | 920 | 426 | 393 | 260 | 128 | 30 | 2615 |
| November | ... 386 | 835 | 391 | 284 | 335 | 126 | 40 | 2397 |
| December | ... 282 | 688 | 374 | 213 | 199 | 96 | 32 | 1884 |
| Total | ... 4508 | 9458 | 4879 | 3225 | 3205 | 1357 | 376 | 27017 |
| Total 1934 | ... 4787 | 9212 | 5849 | 3515 | 2722 | 994 | 343 | 27408 |
| Average Attendance per Session, 1935 | 92.0 | 101.7 | 103.8 | 65.8 | 64.1 | 28.3 | 14.5 | 74.6 |
| Average Attendance per Session, 1934 | 95.7 | 105.9 | 124.4 | 70.3 | 54.4 | 20.3 | 13.2 | 76.3 |

Excluding the Ante-Natal Centres, the average attendance per session was 87.79, compared with 91.80 the corresponding figure for the preceding year.

ATTENDANCES AT CENTRES, 1935. TABLE 2.

| Month | No. of Births Notified | PRIMARY | | | INFANTS | | | ANTE-NATAL ATTENDANCES | | | TOTAL ATTENDANCES | |
|-------|------------------------------|----------------|---------------|-------|----------------|---------------|-------|---------------------------|-------------|-------|----------------------|-------|
| | | Under 1 yr. | Over 1 yr. | Total | Under 1 yr. | Over 1 yr. | Total | Pri- mary | Re- peat | Total | 1935 | 1934 |
| Jan. | 119 | 96 | 15 | 111 | 1003 | 1110 | 2113 | 29 | 108 | 137 | 2361 | 2360 |
| Feb. | 97 | 72 | 6 | 78 | 960 | 1136 | 2096 | 22 | 102 | 124 | 2298 | 2359 |
| March | 127 | 49 | 14 | 63 | 1029 | 1084 | 2113 | 25 | 115 | 140 | 2316 | 2435 |
| April | 125 | 83 | 6 | 89 | 902 | 964 | 1866 | 19 | 106 | 125 | 2080 | 2287 |
| May | 99 | 76 | 12 | 88 | 1005 | 970 | 1975 | 21 | 129 | 150 | 2213 | 2330 |
| June | 116 | 65 | 5 | 70 | 902 | 805 | 1707 | 29 | 102 | 131 | 1908 | 2523 |
| July | 123 | 66 | 16 | 82 | 1361 | 1159 | 2520 | 20 | 132 | 152 | 2754 | 2583 |
| Aug. | 106 | 53 | 6 | 59 | 820 | 637 | 1457 | 28 | 163 | 191 | 1707 | 1682 |
| Sept. | 125 | 66 | 10 | 76 | 1183 | 1094 | 2277 | 17 | 114 | 131 | 2484 | 2150 |
| Oct. | 124 | 72 | 11 | 83 | 1198 | 1176 | 2374 | 27 | 131 | 158 | 2615 | 2610 |
| Nov. | 105 | 77 | 14 | 91 | 1130 | 1010 | 2140 | 33 | 133 | 166 | 2397 | 2473 |
| Dec. | 136 | 34 | 6 | 40 | 915 | 801 | 1716 | 20 | 108 | 128 | 1884 | 1616 |
| Total | 1402 | 809 | 121 | 930 | 12408 | 11946 | 24354 | 290 | 1443 | 1733 | 27017 | — |
| 1934 | 1323 | 806 | 117 | 923 | 11873 | 13275 | 25148 | 224 | 1113 | 1337 | — | 27408 |

INFANTILE MORTALITY RATES 1916 to 1935



HOME VISITS PAID BY HEALTH VISITORS, 1935.

| Months | To Infants under 1. | | To Children. | To expectant Mothers | | Total Visits Paid | |
|------------|---------------------|-------|--------------|----------------------|-------|-------------------|--------|
| | First Visits | Total | 1-5 Total | First Visits | Total | 1935 | 1934 |
| January | 110 | 382 | 656 | 23 | 47 | 1085 | 1201 |
| February | 81 | 390 | 642 | 28 | 38 | 1070 | 1318 |
| March | 102 | 447 | 859 | 18 | 45 | 1351 | 1255 |
| April | 108 | 382 | 632 | 22 | 38 | 1052 | 1229 |
| May | 102 | 447 | 932 | 16 | 49 | 1428 | 1196 |
| June | 90 | 334 | 664 | 8 | 28 | 1026 | 960 |
| July | 105 | 388 | 742 | 17 | 44 | 1174 | 1213 |
| August | 98 | 398 | 762 | 13 | 31 | 1191 | 1202 |
| September | 72 | 308 | 596 | 12 | 24 | 928 | 1031 |
| October | 123 | 439 | 865 | 21 | 51 | 1355 | 1264 |
| November | 97 | 400 | 798 | 19 | 46 | 1244 | 1318 |
| December | 88 | 344 | 616 | 11 | 24 | 984 | 986 |
| Total 1935 | 1176 | 4659 | 8764 | 208 | 465 | 13,888 | — |
| Total 1934 | 1217 | 4712 | 8942 | 196 | 519 | — | 14,173 |

INFANTILE MORTALITY.

The number of deaths of infants under one year of age during the year was 72, a reduction of nine on last year's figure. The infantile mortality rate is 56 per 1000 live births, compared with 62 the rate for 1934, and with 57, the rate for England and Wales for the year 1935. This is the lowest rate recorded in the Borough. In the graph opposite is shown the infantile mortality rates for Stockton-on-Tees and for England and Wales for the years 1901 to 1935, and the same rates calculated for five-year periods.

There were 37 deaths during the year at ages under 4 weeks, compared with 43 last year.

In the following table the number of Infant Deaths, Stillbirths and Neo-Natal Deaths, together with the corresponding rates, in the various wards of the town are shown.

| WARDS | INFANT MORTALITY | | STILLBIRTHS | | NEO-NATAL DEATHS | |
|-----------------------|------------------|--------------------------|-------------|----------------------------|------------------|---------------------------|
| | No. of deaths | Rate per 1000 live brths | Number | Rate per 1000 total births | Number | Rate per 1000 live births |
| Central | 4 | 48 | 6 | 67 | 3 | 36 |
| Hartburn | 4 | 32 | 5 | 38 | 3 | 24 |
| Norton | 6 | 34 | 10 | 54 | 5 | 28 |
| North-West | 4 | 36 | 4 | 34 | 1 | 9 |
| Parkfield | 5 | 42 | 9 | 71 | 1 | 8 |
| Portrack & Tilery ... | 10 | 59 | 8 | 45 | 5 | 29 |
| South-East | 9 | 111 | 4 | 47 | 3 | 37 |
| South-West | 11 | 91 | — | — | 6 | 50 |
| Station | 6 | 78 | 4 | 49 | 4 | 52 |
| Victoria | 8 | 66 | 11 | 83 | 3 | 25 |
| West-End | 6 | 55 | 3 | 27 | 3 | 28 |
| TOTALS | 73 | 56 | 64 | 47 | 37 | 29 |

Study of the table on page 55 makes it clear that there are two main causes of death among infants. There is firstly the group of conditions associated with congenital debility and prematurity. The deaths assigned to these causes totalled 34. I have dealt elsewhere with some of the factors which influence the incidence of these conditions.

The second group of conditions consists of infections of the lungs and caused 21 deaths. The causes of these conditions are to be found in lowered resistance to disease and to overcrowding.

If the deaths from these two groups of causes are excluded there remain 18 deaths of infants, which represents an infantile death-rate from causes other than congenital causes and respiratory infections of 14 per 1000.

INFANT MORTALITY, 1935.

| CAUSE OF DEATH | | | Under 1 Week | 1-2 Weeks | 2-3 Weeks | 3-4 Weeks | Total under 4 weeks | 4 weeks to 3 months | 3 months to 6 months | 6 months to 9 months | 9 months to 12 months | Total under 12 months | 12 months to 15 months | 15 months to 18 months | 18 months to 21 months | 21 months to 24 months | Total under 2 years |
|----------------|------------------------------|-----|--------------|-----------|-----------|-----------|---------------------|---------------------|----------------------|----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|---------------------|
| 1 | Diphtheria | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2 | Measles | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | 2 |
| 3 | Whooping Cough | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | 1 | ... | 2 |
| 4 | Tuberculous Meningitis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 |
| 5 | Abdominal Tuberculosis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 6 | Other Tuberculous Diseases | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 |
| 7 | Convulsions | ... | ... | ... | 1 | ... | 1 | ... | 2 | 1 | ... | 4 | ... | ... | ... | ... | 4 |
| 8 | Bronchitis | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | 2 | ... | ... | 1 | ... | 3 |
| 9 | Pneumonia (all forms) | ... | 1 | ... | 1 | ... | 2 | 5 | 3 | 6 | 3 | 19 | 4 | 4 | ... | 1 | 28 |
| 10 | Diarrhoea | ... | ... | ... | ... | 1 | 1 | 1 | 1 | ... | 1 | 4 | ... | ... | 1 | ... | 5 |
| 11 | Enteritis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 12 | Gastritis | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 13 | Syphilis | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | 1 |
| 14 | Rickets | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 15 | Atelectasis | ... | 4 | ... | ... | ... | 4 | ... | ... | ... | ... | 4 | ... | ... | ... | ... | 4 |
| 16 | Congenital Malformations | ... | 1 | ... | 1 | ... | 2 | 1 | ... | ... | 1 | 4 | ... | ... | ... | ... | 4 |
| 17 | Premature Birth | ... | 16 | 1 | ... | 2 | 19 | 2 | ... | ... | ... | 21 | ... | ... | ... | ... | 21 |
| 18 | Atrophy, Debility & Marasmus | ... | 2 | ... | 1 | ... | 3 | ... | 1 | ... | ... | 4 | ... | ... | ... | ... | 4 |
| 19 | Inanition | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 |
| 20 | Overlaying | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 21 | Want of Attention at Birth | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 22 | Other Causes | ... | 4 | ... | ... | ... | 4 | ... | 1 | 2 | ... | 7 | 1 | ... | 1 | ... | 9 |
| 23 | Violence | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | 1 | 2 |
| TOTAL | | | 29 | 1 | 4 | 3 | 37 | 10 | 9 | 9 | 8 | 73* | 5 | 5 | 6 | 3 | 92 |

* The Registrar General gives the number of deaths under 1 year as 72.

ANTE-NATAL CENTRES.

Two ante-natal centres are provided by the Corporation, in addition to the ante-natal centre at the Robson Maternity Home which deals only with booked cases. At No. 1 Centre sessions are held weekly while at No. 2 sessions are held fortnightly. 1733 attendances were made at these Centres during the year, 290 primary and 1443 repeat. The average attendance per session increased in the case of No. 1 Centre from 20·3 to 28·3, and in the case of No. 2 Centre from 13·2 to 14·5. The number of expectant mothers who obtained ante-natal care at Centres provided by the Corporation was 54% of the total births registered, an increase of 7% on last year's figure.

The following table gives a summary of the cases attending the Ante-Natal Centres during the year :—

| Preg- nancy | Delivery | | | | | | | | | | Total |
|----------------|----------|-------------------|-----------|----------------------|-------------------|---------------|------------------|----------------|----------------|------------------|-------|
| | Normal | Instru- mental | Stillborn | Caesarian Section | Induced Labour | Abort- ion | Miscarr- iage | Not Pregn't | Not Deliv'd | Left District | |
| 1st | 41 | 13 | (3) | — | — | 1 | — | 1 | 24 | 5 | 85 |
| 2nd | 31 | 7 | — | — | — | 1 | — | — | 17 | — | 56 |
| 3rd | 44 | 4 | (1) | — | — | — | — | — | 18 | — | 66 |
| 4th | 29 | 2 | — | — | — | 1 | — | 1 | 9 | — | 42 |
| 5th | 17 | 1 | (1) | — | — | — | — | — | 6 | — | 24 |
| 6th | 15 | 2 | — | — | — | — | — | 1 | 6 | — | 24 |
| 7th | 11 | — | — | — | — | — | — | — | 6 | — | 17 |
| 8th | 8 | 1 | — | — | — | — | — | — | 3 | — | 12 |
| 9th | 4 | — | — | — | — | — | — | — | — | — | 4 |
| 10th | 5 | 1 | — | — | — | — | — | 1 | — | — | 7 |
| 11th | 1 | — | — | — | — | — | — | — | — | — | 1 |
| 12th | 1 | — | — | — | — | 1 | — | — | — | — | 1 |
| 13th | 1 | — | (1) | — | — | — | — | — | — | — | 1 |
| Totals | 208 | 31 | (6) | — | — | 4 | — | 4 | 89 | 5 | 341 |

The defects found at the Ante-Natal Centres during the year were as follows:—

| | | | |
|-----------------------|-----|-----|-----|
| Anaemia | ... | ... | 128 |
| Albuminuria (slight) | ... | ... | 9 |
| „ (severe) | ... | ... | 2 |
| Dental caries | ... | ... | 43 |
| Varicose veins | ... | ... | 19 |
| Vomiting (slight) | ... | ... | 25 |
| „ (severe) | ... | ... | 9 |
| Raised blood pressure | ... | ... | 5 |
| Rheumatism | ... | ... | 2 |

SUPERVISION OF MIDWIVES.

At the end of 1935, there were 25 midwives practising in the Borough, including four at the Robson Maternity Home and one at the Public Assistance Committee's Hospital.

These midwives attended 1105 cases as midwives and 179 as maternity nurses during the year. The former figure includes 352 births attended by midwives in the Robson Maternity Home and the latter figure 24 births attended by midwives in the Home acting as maternity nurses.

During the year medical help was sent for by midwives on 460 occasions. The percentage of births attended by midwives in which it was found necessary to call in medical aid was therefore 41·5, or if the cases occurring in the Robson Maternity Home are excluded, 49·4%. The percentage of cases in which medical aid was summoned by a midwife in the Robson Maternity Home was 25.

The number of cases in which the Council paid or contributed to the fee of a midwife during the year was 36

400 accounts were received from doctors in respect of fees for attendance on cases in which they had been summoned by midwives. The total amount of their accounts was £669, a decrease of £69 on last year's figure. In 69 cases, or 15% of the cases in which they were called in, notices were received from doctors stating that they considered it necessary to continue attendance on the patient for a longer period than 10 days.

The following notices were received from midwives during the year, in addition to the 460 notices summoning medical help referred to above.

| | | | |
|---------------------------------------|-------|-----|-------|
| Death of child... | ... | ... | 18 |
| Still-birth | ... | ... | 29 |
| Artificial feeding | ... | ... | 23 |
| Laying out dead body | ... | ... | 17 |
| Liability to be a source of infection | | | 13 |
| Death of mother | ... | ... | 3 |
| | | | <hr/> |
| | Total | | 103 |
| | | | <hr/> |

27 inspections of midwives were carried out during the year.

ROBSON MATERNITY HOME.

The number of beds for patients at the Robson Maternity Home was increased during the year from 12 to 15. This was accomplished by taking over an adjoining house (one adjoining house had already been taken over) for use by the nursing staff and utilising an additional room in the existing Home for patients. These three extra beds were brought into use on March 1st, 1935.

The cost per patient per week for the year ended March 31st, 1935, showed an increase from £2 11s. 1'4d. to £3 1s. 9'4d., excluding loan charges the cost was £3 0s. 7'1d.

The increase in cost for the year ended March 31st, 1935, is more than accounted for by the increase in expenditure under the heads "Domestic renewals, repairs and additions" and "Structural additions, alterations, renewals, repairs and painting" consequent upon the taking over as temporary premises of two adjoining houses.

During the year covered by the return the percentage of beds occupied was 100.

The fee ordinarily charged to patients is 35/- for a period of 12'8 days which is the normal duration of stay. Emergency cases are admitted to the Home from Billingham Urban District under agreement with the Durham County Council at a fee of £3 3s. 0d. per week per patient.

Information with regard to the working of the Home is summarised below :—

| | |
|---|------------------------|
| Number of maternity cases admitted during the year | 392 |
| Average duration of stay | 12·8 days |
| Number of cases delivered by :— | |
| (a) Midwives | 352 |
| (b) Doctors | 24 |
| Number of cases in which medical assistance was sought by a midwife in emergency... .. | 88 |
| Number of cases notified as :— | |
| (a) puerperal fever | Nil |
| (b) puerperal pyrexia | 8 |
| Number of cases of pemphigus neonatorum ... | Nil |
| Number of infants not entirely breast fed while in the institution | 9 |
| (a) Number of cases notified as ophthalmia neonatorum | 2 |
| (b) Result of treatment in each case | Cured |
| (a) Number of maternal deaths | Nil |
| (b) Cause of death in each case | — |
| (a) Number of infant deaths :— | |
| (i) stillborn | 13 |
| (ii) within 10 days of birth | 8 |
| (b) Cause of death in each case, and results of post-mortem examination (if obtainable) | |
| (i) Macerated ... 4 | (ii) Prematurity ... 3 |
| Monsters ... 3 | Malformation ... 2 |
| Precipitate labour ... 2 | Difficult delivery 1 |
| Breech ... 1 | Atelectasis ... 2 |
| Condition of mother 2 | |
| A.P. Haemorrhage ... 1 | |

DISEASES OF ANIMALS ACTS.

Swine Movement Order, 1922. During the year 1935 the following licences were issued under the above Order, compared with the figures for the two previous years.

| | Number of Licences issued. | | | Number of Swine moved. | | |
|------------|----------------------------|--------------|--------------|------------------------|---------------|---------------|
| | 1935 | 1934 | 1933 | 1935 | 1934 | 1933 |
| Fat Swine | 1,843 | 1,833 | 1,909 | 15,429 | 15,248 | 15,575 |
| Store „ | 1,467 | 1,572 | 1,672 | 10,657 | 10,313 | 11,006 |
| Totals ... | <u>3,310</u> | <u>3,405</u> | <u>3,581</u> | <u>26,086</u> | <u>25,561</u> | <u>26,581</u> |

Licences issued for the movement of swine out of the Borough were as follows :—

| | Number of Licences issued. | | | Number of Swine moved. | | |
|------------|----------------------------|--------------|--------------|------------------------|---------------|---------------|
| | 1935 | 1934 | 1933 | 1935 | 1934 | 1933 |
| Fat Swine | 1,205 | 1,217 | 1,637 | 10,066 | 10,018 | 13,934 |
| Store „ | 1,211 | 1,517 | 1,400 | 9,159 | 8,874 | 9,362 |
| Totals ... | <u>2,416</u> | <u>2,734</u> | <u>3,037</u> | <u>19,225</u> | <u>18,892</u> | <u>23,296</u> |

Licences received for swine brought into the Borough were as follows :—

| | Number of Licences issued. | | | Number of Swine moved. | | |
|------------|----------------------------|------------|------------|------------------------|--------------|--------------|
| | 1935 | 1934 | 1933 | 1935 | 1934 | 1933 |
| Fat Swine | 346 | 243 | 188 | 2,519 | 1,463 | 1,526 |
| Store „ | 44 | 42 | 42 | 377 | 391 | 333 |
| Totals ... | <u>390</u> | <u>285</u> | <u>230</u> | <u>2,896</u> | <u>1,854</u> | <u>1,859</u> |

Swine Fever. Seven reports of suspected swine fever were received during the year. In five of the cases the premises were placed under Form A and in two under Form B. The premises were under restrictions for periods varying from 2 to 14 weeks.

Sheep Scab. Contacts from 14 outbreaks of sheep scab, numbering 327 sheep were brought into the Borough. 286 sheep from 10 outbreaks were exposed in the Cattle Market, 20 weekly markets being affected. The sheep were all traced and either double dipped or slaughtered.

Sheep (Movement into Scotland and Northumberland) Order of 1933. 15 licences covering 170 sheep and lambs were issued during the year.

Importation of Animals Act, 1922. Three consignments of 68 head of cattle were brought into the Borough. The quarantine regulations were properly carried out by the owners.

Importation of Dogs and Cats Order, 1928 and other Quarantine Orders. Three notifications were received from the Customs Officers of ships arriving with dogs on board, and one troupe of performing dogs under licence from the Ministry of Agriculture and Fisheries was here for one week. These were all effectively kept under control during their stay.

Conveyance of Live Poultry Order, 1911.

Packing Materials Order, 1925.

Movement of Animals (Records) Order.

Movement of Animals by Road Vehicles (Records) Order.

Importation of Meat (Wrapping Materials) Order, 1932.

These Orders have been satisfactorily carried out during the year.

Anthrax. No outbreaks have occurred in the Borough but hides from infected cases have twice been brought in. These were dealt with.

No cases of Foot and Mouth Disease, Parasitic Mange, Glanders, Farcy or Sheep Pox occurred during the year.

Transit and General Order, 1917. The cleansing of cattle trucks, boxes, storage pens, road vehicles and yard has been carried out satisfactorily by the L. & N. E. Railway Co., during the year.

Cattle Market. The following table shows the number of animals which passed through the Cattle Market during the year 1935, compared with the figures for the two preceding years.

| | 1935 | 1934 | 1933 |
|--------------------|-------------------|-------------------|-------------------|
| Milch Cows ... | 534 | 628 | 450 |
| Fat Cattle ... | 7698 | 5790 | 4823 |
| Grazing Cattle ... | 202 | 214 | 273 |
| Calves ... | 3358 | 2391 | 1476 |
| Sheep and Lambs | 28564 | 31718 | 33278 |
| Swine ... | 26086 | 25561 | 26581 |
| | <hr/> 66442 <hr/> | <hr/> 66302 <hr/> | <hr/> 66881 <hr/> |

APPENDIX

BIRTH RATES, DEATH RATES AND ANALYSIS OF MORTALITY, IN THE YEAR 1935

ENGLAND & WALES, 121 COUNTY BOROUGH & GREAT TOWNS, 140 SMALLER TOWNS, LONDON & STOCKTON-ON-TEES

| | BIRTH RATE PER 1,000 POPULATION | | ANNUAL DEATH-RATE PER 1,000 POPULATION. | | | | | | | | | | RATE PER 1,000 LIVE BIRTHS | |
|--|---------------------------------|--------------|---|--------------------------------|-----------|---------|---------------|----------------|------------|-----------|----------|--|----------------------------|--|
| | Live Births | Still-Births | All Causes | Typhoid and Paratyphoid Fevers | Small-pox | Measles | Scarlet Fever | Whooping cough | Diphtheria | Influenza | Violence | Diarrhoea and Enteritis (under 2 yrs.) | Total Deaths under 1 year | |
| England and Wales ... | 14.7 | 0.62 | 11.7 | 0.00 | 0.00 | 0.03 | 0.01 | 0.04 | 0.08 | 0.18 | 0.52 | 5.7 | 57 | |
| 121 County Boroughs and Great Towns, including London ... | 14.8 | 0.68 | 11.8 | 0.00 | 0.00 | 0.04 | 0.01 | 0.04 | 0.09 | 0.16 | 0.45 | 7.9 | 62 | |
| 140 Smaller Towns (Resident Populations 25,000 to 50,000 at Census 1931) ... | 14.8 | 0.64 | 11.2 | 0.00 | 0.00 | 0.03 | 0.01 | 0.03 | 0.07 | 0.17 | 0.41 | 3.8 | 55 | |
| London Administrative County... | 13.3 | 0.52 | 11.4 | 0.00 | 0.00 | 0.00 | 0.01 | 0.04 | 0.06 | 0.11 | 0.51 | 11.2 | 58 | |
| Stockton-on-Tees ... | 19.1 | 0.92 | 12.2 | — | — | 0.10 | — | 0.06 | 0.06 | 0.17 | 0.40 | 3.9 | 56 | |

| | | | Puerperal Sepsis. | | Others. | Total |
|--|-----|------------------|-----------------------|-----|---------|-------|
| The maternal mortality rates for England & Wales are as follows: | | | per 1,000 Live Births | ... | 2.42 | 4.10 |
| | | | " " Total Births | ... | 2.32 | 3.93 |
| | | | per 1,000 Live Births | ... | 5.45 | 7.00 |
| | | | " " Total Births | ... | 5.20 | 6.68 |
| do. | do. | Stockton-on-Tees | do. | | | |

CAUSES OF DEATH IN STOCKTON-ON-TEES, 1935.

| CAUSE OF DEATH | Total | Males | Females |
|---|-------|---------|---------|
| ALL CAUSES ... | 820 | 432 | 388 |
| 1—Typhoid and paratyphoid fevers | — | — | — |
| 2—Measles ... | 7 | 2 | 5 |
| 3—Scarlet Fever ... | — | — | — |
| 4—Whooping cough ... | 4 | 1 | 3 |
| 5—Diphtheria ... | 4 | 3 | 1 |
| 6—Influenza ... | 12 | 8 | 4 |
| 7—Encephalitis lethargica ... | 1 | — | 1 |
| 8—Cerebro-spinal fever... | 1 | — | 1 |
| 9—Tuberculosis of respiratory system ... | 42 | 17 | 25 |
| 10—Other tuberculous diseases ... | 8 | 3 | 5 |
| 11—Syphilis ... | 3 | 3 | — |
| 12—General paralysis of the insane, tabes dorsalis ... | 3 | 3 | — |
| 13—Cancer, malignant disease ... | 101 | 49 | 52 |
| 14—Diabetes ... | 6 | 4 | 2 |
| 15—Cerebral hæmorrhage ... | 44 | 25 | 19 |
| 16—Heart Disease ... | 182 | 99 | 83 |
| 17—Aneurysm ... | 2 | 2 | — |
| 18—Other circulatory diseases ... | 47 | 27 | 20 |
| 19—Bronchitis ... | 35 | 21 | 14 |
| 20—Pneumonia (all forms) ... | 73 | 35 | 38 |
| 21—Other respiratory diseases ... | 3 | 3 | — |
| 22—Peptic ulcer ... | 9 | 9 | — |
| 23—Diarrhœa, &c. (under 2 years) | 5 | 3 | 2 |
| 24—Appendicitis ... | 4 | 2 | 2 |
| 25—Cirrhosis of Liver ... | 3 | 3 | — |
| 26—Other diseases of liver, etc. ... | 3 | 1 | 2 |
| 27—Other digestive diseases ... | 30 | 12 | 18 |
| 28—Acute and chronic nephritis ... | 23 | 8 | 15 |
| 29—Puerperal sepsis ... | 2 | — | 2 |
| 30—Other puerperal causes ... | 7 | — | 7 |
| 31—Congenital debility, premature birth, malformations, &c. ... | 36 | 25 | 11 |
| 32—Senility ... | 32 | 17 | 15 |
| 33—Suicide ... | 6 | 4 | 2 |
| 34—Other violence ... | 21 | 10 | 11 |
| 35—Other defined causes ... | 59 | 31 | 28 |
| 36—Causes ill-defined or unknown | 2 | 2 | — |
| Special Causes (included in No. 35 above) — | | | |
| Small-pox ... | — | — | — |
| Poliomyelitis ... | — | — | — |
| Polioencephalitis .. | — | — | — |
| Deaths of Infants under 1 year— | | | |
| Total ... | 72 | 45 | 27 |
| Legitimate ... | 68 | 41 | 27 |
| Illegitimate... | 4 | 4 | — |
| LIVE BIRTHS—Total ... | 1285 | 643 | 642 |
| Legitimate ... | 1231 | 615 | 616 |
| Illegitimate... | 54 | 28 | 26 |
| STILL BIRTHS—Total ... | 62 | 37 | 25 |
| Legitimate ... | 61 | 37 | 24 |
| Illegitimate... | 1 | — | 1 |
| Population ... | ... | 67,050. | |





